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ABSTRACT

This publication is intended to supersede the Higher Education and Facilities Inventory and Classification Manual (FICM) first published in December 1972. Like the earlier manual, this revised and updated version provides a common framework and coding structure to be used in collecting and reporting inventory data on college and university "buildings" and on the spaces within these structures, primarily "rooms." Following an introductory chapter, Chapter 2 of the manual discusses basic concepts and definitions recommended by the manual. Chapter 3 provides guidance for starting such a system, particularly for institutions not yet engaged in this type of reporting and analysis. Chapter 4 integrates the primary concepts related to building definitions, measurements, and data elements. Chapter 5 contains the materials relevant to room use definitions, including the extensive room use coding structure. Chapter 6 provides a list of commonly asked questions and answers arising from the use of the manual. Nine appendices provide greater detail on the coding structures, discuss optional data elements related to architectural features and room suitability, the use of such data for inter-institutional data exchange and reporting; and provide crosswalks and overviews of coding changes contained in this revised manual. Provided also is a glossary that serves as an index for locating references in the manual that define basic inventory terms and components. (GLR)

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POSTSECONDARY EDUCATION FACILITIES INVENTORY AND CLASSIFICATION MANUAL

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POSTSECONDARY EDUCATION FACILITIES INVENTORY

AND

CLASSIFICATION MANUAL

NOVEMBER 1992

WORKING GROUP
ON
POSTSECONDARY
PHYSICAL FACILITIES

ROSLYN KORB
NATIONAL CENTER FOR EDUCATION STATISTICS

U.S. Department of Education
Lamar Alexander
Secretary

Office of Educational Research and Improvement
Diane Ravitch
Assistant Secretary

National Center for Education Statistics
Emerson J. Elliott
Commissioner

National Center for Education Statistics

"The purpose of the Center shall be to collect, and analyze, and disseminate statistics and other data related to education in the United States and in other nations."—Section 406(b) of the General Education Provisions Act, as amended (20 U.S.C. 1221e–1).

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WORKING GROUP ON COLLEGE AND UNIVERSITY PHYSICAL FACILITIES

J. Michael Mullen (Chair)
Council of Higher Education
for Virginia

Harlan D. Bareither
University of Illinois

Gary Bishop
University of Nevada-Reno

Joanne D. Cate
University of California System

Robert L. Clowers
Council of Higher Education
for Virginia

Denis J. Curry
MGT of America

Kreon L. Cyros
Massachusetts Institute of
Technology

John A. Dunn, Jr.
Center for Planning Information
Tufts University

James W. Firnberg
Higher Education Consultant

Trudis Heinecke
University of California System

Carol S. Hollins
John Tyler Community College

Dennis Jones
National Center for Higher
Education Management Systems

Harvey H. Kaiser
Syracuse University

John Kelton
Davidson College

Lucie Lapovsky
Goucher College

Charles S. Lenth
State Higher Education
Executive Officers

David D. McFadden
North Carolina Higher
Education Facilities Commission

Joan Racki
Idaho State Board of Education

For the National Center for Education
Statistics, Postsecondary Education
Statistics Division:
Samuel S. Peng
Roslyn Korb

For the National Science Foundation,
University and Colleges Study Group:
James Hoehn
Judith F. Coakley

FOREWORD

NCES is pleased to release the 1992 Facilities Inventory and Classification Manual (FICM) . It is a major update of the types and uses of postsecondary institutions' physical facilities and re-establishes current and consistent definitions and classification codes to collect, report, and exchange comparable data on institutional facilities.

At the outset of this effort, the only existing national standards for facilities data had been published by NCES in 1973 and thus were almost 20 years old. Because the planning for and use of facilities have evolved over that period of time, many states and individual institutions had devised, or were beginning to devise their own, unique classification structures and definitions. As a result, problems with comparing facilities information became increasingly severe and the need to undertake an update of the national standards became more and more critical.

This national effort was initiated by a small group of dedicated individuals, but quickly evolved into a collaborative and collegial activity that encompassed many individuals from diverse sectors of the postsecondary education community. These included not only the members of the Working Group on Postsecondary Physical Facilities who drafted several versions of the updated manual, but also the over 200 individuals from postsecondary education institutions and state higher education agencies who reviewed and commented on the several drafts.

NCES has a strong commitment to provide technical assistance and support to the education community to facilitate the collection, reporting, and use of high quality education data. This manual is one outcome of that commitment. In the future NCES hopes to support the development of additional manuals and to update them on more regular cycles.

That the 1973 Facilities Inventory and Classification Manual was considered the standard to be followed for so many years and is the basis for the current manual testifies to the work of those individuals who conceived the original strategy for describing facilities in postsecondary institutions. We are confident that once the education community begins using this 1992 FICM, it will have the same lasting value and utility as its 1973 predecessor.

Paul Planchon
Associate Commissioner
Postsecondary Education Statistics Division

Roslyn A. Korb
Acting Chief
Cross Sectional Studies Branch

ACKNOWLEDGMENTS

From its inception to completion, this project has reflected voluntary cooperation and genuine collaboration among many individuals and organizations. In several instances, the circumstances and extent of this involvement deserve specific acknowledgment.

J. Michael Mullen of the State Council of Higher Education for Virginia, who became involved as a result of his participation on a higher education facilities panel at the annual forum of the Association for Institutional Research in 1989, subsequently chaired the working group assembled to revise and update the 1973 facilities manual. John A. Dunn, who was then president of the Society for College and University Planning (SCUP), organized a well-attended meeting at the close of the SCUP annual conference in mid-1989. His support and contributions have been steadfast throughout the project, including drafting several new chapters. Also in 1989, Charles S. Lenth of the State Higher Education Executive Officers (SHEEO) organization became involved as a reflection of state interest in encouraging greater comparability in facilities data. He assumed responsibility for organizing meetings, assembling materials, coordinating the field review, editing, and other aspects of the project.

SHEEO assembled the Working Group on College and University Physical Facilities in late 1989, attempting to involve and draw on diverse perspectives, institutional and state needs, and individual expertise. Without the direct and substantive contributions of the working group, this project could not have been carried out. Several individuals took on primary responsibility for drafting chapters of the revised manual and incorporating field review comments; others participated in numerous meetings and contributed their experience and perspectives. Special acknowledgment should be given to the contributions of David D. McFadden, who chaired the subcommittee on room use codes; Kreon L. Cyros, who contributed the building definitions sections and chaired that subcommittee; Joanne D. Cate, who contributed to many sections of the manual and prepared a data exchange instrument; Joan Racki, who wrote the question and answer chapter; and Denis J. Curry, whose experience and advice helped to shape many parts of the manual. Robert L. Clowers and Adrienne Sack played essential roles in assembling and formatting the revised manual.

The working group met numerous times from late 1989 through 1991 to prepare drafts, review comments and attempt to forge a true consensus approach suitable for the collection and exchange of data on physical facilities. Acknowledgment must also be made for the effort and contributions by the many practitioners throughout the country who contributed comments, suggestions and ideas as part of the extensive field review of early drafts of this revised manual, and to the organizations and state higher education offices who helped to facilitate the field review. Their contributions were essential to the consensus sought by the working group.

In many ways this project has been a new venture in joint federal, state, institutional, organizational and individual professional collaboration. All who have been involved have and can continue to benefit from such a process. The 1973 physical facilities data manual lasted, more or less intact, for nearly 20 years. All who were involved hope that this update of that manual will be equally useful and enduring.

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PREFACE

Scratch the surface of any higher education facilities data system and you are more than likely to find "FICM," the 1973 *Higher Education Facilities Inventory and Classification Manual*[1], Published by the National Center for Edcuation Statistics (NCES). The manual was developed by a group of facilities experts under a contract to the National Center for Higher Education Management Systems (NCHEMS) from the then Office of Education in the U.S. Department of Health, Education and Welfare (HEW). It evolved through several versions and was issued and used with the imprimatur of professional groups, state agencies and institutional associations. Last published by NCES in 1974, the manual has been widely used and adapted and, for the most part, has faithfully withstood the test of time and multiple purposes.

For at least a decade, however, practitioners in the field, facilities managers and policy makers have recognized the need to update and reissue the FICM manual. Building types and room uses have changed substantially, the nomenclature and technologies for data collection have been advanced, and the types of information needed have shifted. Many institutions, associations of cooperating institutions, and states have accommodated these changes through modifications or additions to the definitions and categories established by FICM. The result, of course, is detrimental to the comparability of data collected on higher education facilities, and has reduced the availability and usefulness of information to facilities managers, planners, policy makers and the public.

This manual is intended to supersede the 1973 edition of FICM. As with the earlier manual, this revised and updated version provides a common framework and coding structure to be used in collecting and reporting inventory data on college and university "buildings," and on the space within those structures, primarily "rooms." Physical "facilities" is used as a more generic term to include other types of structures, real property and fixed assets, although "buildings" and "rooms" will typically be the two primary components of a facilities inventory system. The manual suggests to institutions a pattern for compiling essential data on their physical facilities and provides a set of common building definitions and room codes so that the reported data are reasonably consistent and comparable across institutions and states. The 1973 manual also provided the definitions used for the last federal survey of college and university facilities, which was part of the Higher Education General Information Survey (HEGIS IX) for the 1974-75 academic year.

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[1] Leonard C. Romney, *Higher Education Facilities Inventory and Classification Manual*, 1973, produced by the National Center for Higher Education Management Systems at WICHE under contract with the U.S. Department of Health, Education and Welfare. Washington, D.C.: U.S. Government Printing Office, 1974.

Revisions, modifications and additions to the 1973 manual have been made in order to:

1. Account for changes in building structures and room uses that have occurred in the intervening years;

2. Reflect current practices and nomenclature in facilities inventory systems and postsecondary education; and

3. Make the manual as clear and easy to use as possible.

Changes in these areas reflect the judgment of the working group that assembled this revised manual, as well as the many comments and suggestions made from the field.

Users of the previous 1973 manual will need to note the following changes in this revised version:

1. **Title and Application**

   In recognition of the diversity and proliferation of postsecondary education providers, the title has been changed and the intended application of this manual expanded to include all postsecondary institutions, schools, organizations and other data providers within the universe of the Integrated Postsecondary Education Data System (IPEDS) administered by the National Center for Education Statistics. Not all sections will be relevant to the facilities inventories of smaller schools, institutions and organizations.

2. **Organization**

   Sections have been rearranged to simplify the organization of the manual and to incorporate materials that were previously in appendices into the appropriate sections. Building data definitions and codes are now in Chapter 4, and the room use definitions and codes are in Chapter 5.

3. **Nomenclature and Program Classification Structures**

   The 1973 manual used the NCHEMS' *Program Classification Structure* (PCS) to assign space to functional program areas (e.g., Instruction, Organized Research, Public Service, etc.) and the *Taxonomy of Instructional Programs in Higher Education* (the HEGIS discipline codes) to further classify some functional areas to standard academic discipline categories. The former codes were referred to as "programs" and the latter as "program categories."

   To help avoid the ambiguity in these similar terms, this revised manual refers to the first coding structure as *function* codes or functional categories. For

functional coding, this revised manual recommends the structure of the National Association of College and University Business Officers (NACUBO) that is widely used for financial reporting. This structure is introduced in Chapter 2 and outlined in Appendix 2.

For coding space by the type of academic or instructional use, this revised manual uses the nomenclature *academic discipline*. Since the HEGIS academic discipline codes are no longer used by the National Center for Education Statistics (NCES), this manual recommends that institutions and states use a disciplinary or academic organization structure that is appropriate for their institution(s). For purposes of external reporting, it is further recommended that these academic discipline or organizational codes be capable of being crosswalked to the NCES *Classification of Instructional Programs* (CIP) at an appropriate level of detail. This academic program reporting structure is also introduced in Chapter 2 and is outlined in Appendix 3.

4. **Data Elements**

This revised manual suggests several new or additional data elements for buildings and rooms to reflect current data needs and uses. Chapter 2 divides these building and room data elements into recommended and optional categories, and provides technical definitions and explanations for these data fields. The categories are intended as guidelines for constructing an inventory system and for data exchange across institutions, without inhibiting institutions from collecting additional information or accommodating their information needs through other means.

5. **Room Use Codes**

The structure of the 1973 room use codes remains essentially intact in the updated Room Use Category Structure found in Chapter 5. Definitions have been clarified and codes added or combined when necessary to reflect new room categories or prevailing room use patterns. Appendix 8 provides an overview of major code changes, and Appendix 9 a crosswalk of the 1973 codes to the revised room codes.

6. **Condition Codes/Suitability Codes**

The codes used for the *condition of space* have been retained from the 1973 manual and are included in Chapter 4. Optional *suitability codes* (suitability of the room for its current uses), based on codes developed and used by the National Science Foundation (NSF), are provided in Appendix 5.

7. **Adaptation to Current Practices**

The previous manual was published at a time when many institutions collected and compiled facilities data using "paper" forms and hand calculations. Computerized systems were found mainly in larger institutions (or states) and relied on card entry to mainframe computer systems. This revised manual is intended to accommodate today's diverse data base management equipment and practices, including the use of microcomputers, minicomputers, mainframes or some combination of these systems. Institutions without a developed system should see Chapter 3, "How to Get Started."

It should be emphasized that, as with the 1973 version, the title refers to facilities inventory, but the definitions and procedures pertain only to buildings and rooms. Other types of institutional facilities, such as playing fields, uncovered parking areas, and utility networks, are not included. It is recommended that institutions and states include these other types of facilities as well as land and capital equipment in their broader, fixed-asset inventory systems.

During the development of this document, the requirements of the Americans with Disabilities Act (P.L. 101-336) began to be implemented. It is clear that physical barriers within rooms or at entrances to buildings could limit access to programs and services housed within such locations. However, some aspects of the interpretation and implementation of this Act as applied to colleges and universities may remain unresolved for some time. The 1991 publication of the Association of Higher Education Facilities Officers, *Removing the Barriers: Accessibility Guidelines and Specifications*, by S.R. Colter, provides guidance on what information should be included in an institution's facilities inventory and accessibility reviews. Rather than attempting to establish a suggested coding structure, this manual identifies access to facilities and programs as a major issue and refers readers to the most recent federal and industry publications for detailed requirements, such as the Uniform Federal Accessibility Standards or the ADA Accessibility Guidelines developed by the Architectural and Transportation Barriers Compliance Board.[2]

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[2]Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against individuals with disabilities in programs or activities that receive or benefit from financial assistance from the U.S. Government. In addition, Title II of the Americans with Disabilities Act (ADA) of 1990 prohibits discrimination on the basis of disability in state and local government programs.

Currently, the Section 504 Regulation reference the Uniform Federal Accessibility Standards (UFAS), which provide accessibility standards for the disabled for existing facilities as well as new construction. Under Title II of the ADA, moreover, state and local government entities must comply with either UFAS or the ADA Accessibility Guidelines. An overview of the Section 504 program accessibility standards and the accessibility standards under ADA is provided in Appendix 1. More comprehensive standards are available from the Elementary and Secondary Education Policy Division of the Office of Civil Rights of the U.S. Department of Education.

CHAPTER 1

INTRODUCTION

Postsecondary institutions typically serve multiple missions of instruction, research and many types of public service. In the past two decades, new and diverse roles and services have been added to these traditional missions, while more specialized postsecondary organizations and providers also have proliferated. To carry out these diverse missions, institutions use an array of resources including faculty, staff, library holdings and equipment to serve students and the public. These resources are housed within the institutions' physical facilities, a major component of the fixed or capital assets of postsecondary education.

Many institutions and states regularly collect and use data about physical facilities. These activities are not, however, as universal as reporting on many other aspects of postsecondary education operations and resources. As a result, data sharing and comparative statistics are limited.

To help meet the needs for comparability across existing data systems, greater universality in data collection and additional sources of reliable statistics, this manual:

1. Provides practitioners in the field with a current and common framework of terms and definitions around which to build their data systems on physical facilities;

2. Helps institutions not yet regularly compiling such data to establish an appropriate system; and

3. Assists the external sharing and reporting of facilities data in comparable formats and in forms useful to analysts and policy makers at the institutional, state and national levels.

The responsibility to use and maintain its physical facilities in an effective and efficient manner rests with each postsecondary institution. It follows that the maintenance of data and information systems on physical facilities is primarily the responsibility of the individual institution. This means that the design of the system, the level of detail and the specific needs or issues to be addressed should be determined by the institution and its governing board. In exercising this responsibility, it is often advantageous to develop systems that are compatible with those of other institutions, and it is frequently required that selected data components be reported to other levels (system, state or national) or to the public. While these external uses of data require less detail than internal management, the various levels of data collection and reporting need to be related both conceptually and definitionally.

This manual provides the conceptual and definitional relationships for reporting on the major components of postsecondary physical facilities; namely, buildings and the use of space within those buildings. The manual facilitates the classification of the types of buildings and identifies

detailed categories of room use through definitions, classification systems and codes that describe and quantify building areas. Information and analyses derived from the data are necessary for the effective management and use of existing facilities, in planning for future expansions or retirement of unnecessary facilities, and in budgeting for necessary maintenance and modification.

Buildings play an important part in the delivery of educational services and other aspects of institutional missions. Good planning and management of college and university buildings are essential for many reasons, including:

1. The amount and suitability of building space directly affect the scope and quality of educational services provided.

2. Buildings are the largest component of an institution's capital budget and require a significant portion of its annual operating revenues. Inappropriate facilities can increase the consumption of scarce resources and reduce the resources available for direct program delivery.

3. Acquisition of any capital asset represents a major commitment of current and projected financial resources. Decisions to construct or acquire new buildings represent major, long-term financial commitments and will affect program offerings for a significant period of time.

4. Buildings are highly visible components of an institution. Architectural design, construction quality, building usage, campus accessibility, and maintenance standards play a significant role in creating the environment in which education and scholarship are conducted and in shaping external perceptions of an institution.

In addition, in terms of the day-to-day management of resources, building and room inventory systems can be used for:

1. Scheduling and assigning space for program delivery and development;

2. Accounting for the use of space in calculating program costs or indirect cost rates;

3. Planning construction, renovation and maintenance; and

4. Providing useful cross-institutional comparisons to help inform managerial and administrative decisions.

Since the definitions, codes and procedures in this manual are limited to buildings and the rooms within those buildings, the guidelines which are outlined are intended to be only part of a total

facilities and capital assets inventory process or system. Institutions may find it useful to include other types of structures and fixed assets in their total facilities inventory systems. Additionally, the coding structures provided are not intended to define completely the requirements for institutional definitions, classifications or terminology. Institutions may need to add greater detail and specificity in order to make the procedures contained in this manual consistent with their own needs and purposes for a facilities inventory. In addition, the manual does not include procedures for utilization studies or for projecting future needs. Both are valuable additions at the institution and state levels.

The chapters that follow define the key organizing principles, purposes, and components of a facilities inventory system. Chapter 2 discusses basic concepts and definitions recommended by this manual. Chapter 3 provides some guidance for starting such a system, particularly for institutions not yet engaged in this type of reporting and analysis. Chapter 4 integrates the primary concepts related to building definitions, measurements and data elements. Chapter 5 contains the materials relevant to room use definitions, including the extensive room use coding structure. Chapter 6 provides a list of commonly asked questions and answers arising from the use of this manual.

The appendices that follow provide greater detail on the coding structures, discuss optional data elements related to architectural features and room suitability, and provide crosswalks and overviews of coding changes contained in this revised manual. Appendix 7 discusses using facilities inventory data for multi-institutional data exchange and reporting, and provides a sample format for this purpose. The glossary serves as an index in providing location references for the definitions of basic inventory terms and components. In addition, the glossary provides brief definitions for generic facilities terms and other data elements as well as explanations of acronyms and abbreviations used in the manual.

CHAPTER 2

BASIC PRINCIPLES, COMPONENTS, CODING STRUCTURES, AND DATA ELEMENTS

This chapter provides an overview of the central concepts and components of a facilities inventory and classification system. It is intended as an introduction to the use of this manual and as an aid to understanding how the key components fit together. Additional explanatory detail, technical definitions, and procedures are provided in subsequent chapters and the appendices.

The central concepts and components outlined in the following sections of this chapter include:

1. basic principles underlying the structure and uses of this manual;
2. the building inventory components and measurement terms;
3. the principles and coding structures for the room (or space) inventory; and
4. the data elements (or types of information) appropriate to buildings and rooms within the data system.

Basic Principles

This Manual Is Designed Primarily For Institutional Use. A comprehensive, reliable and up-to-date facilities inventory is an important tool for the planning and management of an institution of higher education or other postsecondary facility. Accordingly, this manual is written primarily for use at the institution or campus level.

Facilities Inventory Data Should Be Capable of Uniform Aggregation For External Use. Facilities information is also important for interinstitutional comparison, for planning and management of public systems of higher education, and for development of national policy. The information gathered in the inventory should be structured to make valid comparisons and summaries possible.

Facilities Inventory Systems Contain Data About Buildings and About Rooms Within Buildings. A facilities inventory may incorporate data about many types of structures and physical assets, the most important of which relate to buildings and rooms. Building information includes such items as gross area, assignable area, and replacement cost. Room information includes such items as room area, room use, and number of stations. Recommended and optional data elements for both buildings and rooms are defined in subsequent sections of this chapter.

Each Building And Room Needs A Unique Identifier. The initial step in a facilities inventory is to assign each building and room a unique code to identify a "record" or set of data fields within the inventory. These identifiers are then used to link rooms to buildings, and to link the facili-

ties inventory records to other institutional information such as plant asset records, the registrar's course schedule, and equipment inventories.

Each Building And Room Record Has Several "Fields" Of Data. Each building or room has a separate "field" for each type or element of information. For a given room, its identifying code or room number, room use category, functional assignment, and area are essential types of data. Other items such as the number of occupants it can accommodate, architectural features and suitability for specific uses also may be important. Each of these pieces of information is recorded in a separate field within the room record. Merging of different kinds of information into a single field should be avoided.

This Manual Provides Basic Coding Structures To Which Institutions Can Add. The manual outlines a set of definitions and codes that is as simple as possible while still covering the range of important building and room information. Most interinstitutional comparisons, system reports and national surveys can be satisfactorily derived from this structure. Institutions should build from this conceptual framework to enhance the inventory's usefulness for individual campus management.

Institutions may wish to add additional detail to the coding structures. For example, a college or university might add sub-codes to the general category of Laboratory Service Rooms to keep track of cold rooms, hot rooms, darkrooms, laboratory stockrooms and the like. Some institutions may wish to differentiate between classrooms assigned to individual departments and those centrally controlled by the registrar or dean's office. Others may wish to identify study rooms or labs with specialized equipment for mediated instruction or study. This may be done with suffixes or by creating subsidiary codes that can be aggregated to Laboratory Service Rooms for external reporting.

Another way institutions can build on the basic inventory is to add fields to record other kinds of data. The manual identifies a basic or "recommended" set of data elements or fields, and also identifies a number of optional elements that would be useful for many institutions. These are defined later in this chapter. Institutions may also add their own data fields to respond to local campus needs or requirements.

Some Data Elements Are Important For Campus Use But Are of Limited Use In Multi-Institutional Summaries. The list of data elements includes some items that are important for campus use but lose their meaning in interinstitutional, state or national summaries. For instance, identifiers such as names for particular buildings and rooms are essential for campus use, but not in a state summary. Similarly, organizational unit identifiers (e.g., departments) are important on a particular campus but become less meaningful when summarized across institutions because of different organizational structures.

Concepts And Components Of A Building Inventory

Definition of "Building." A "building" is defined as a roofed structure for permanent or temporary shelter of persons, animals, plants, materials, or equipment. The building inventory may encompass many different types of structures, including marine and space structures (whether staffed or not); research vessels; aquarium structures; and trailers that are not on wheels and are used for offices, residences, or storage. (See technical definitions in Chapter 4.)

Buildings to be Included. The inventory should include buildings that are under the jurisdiction or control of the institution's governing board, regardless of their location. Where the institution occupies space in buildings not owned by the institution or that is shared with other tenants, include in the inventory only that portion of the building leased or controlled by the institution and its prorata share of gross, assignable area and nonassignable area (see definitions below).

Institutions will normally exclude various minor structures from their inventory based on various criteria. As guidelines, separate, minor structures should be included in the inventory if all of the following criteria are met:

1. They are attached to a foundation;

2. They are roofed;

3. They are serviced by a utility, exclusive of lighting; and

4. They are a source of significant maintenance and repair activities.

Following these guidelines, an example of a minor structure to be included in a building inventory is a traffic control or information booth, roofed, attached to a concrete pad, with lights and at least one other utility service, and on a regular maintenance schedule. An example of a separate structure not meeting the above criteria is a bus shelter, which is roofed and attached to the concrete sidewalk, but which has only lights as a utility service.

Institutions may choose to include parking structures and field buildings that do not meet all of the above criteria in their inventories because of requirements to manage and maintain such facilities. The inclusion of such facilities permits the space to be assignable to specific functions, disciplines, and organizational units. Additional clarification and examples are provided in Chapter 4.

Buildings to be Excluded. The following types of buildings should not be in the inventory.

1. Investment properties that are buildings used only for revenue generation and not for institutional purposes.

2. Hospitals not owned by the institution, except for any space in the hospital leased or controlled by the institution.

3. Public schools not owned by the institution, but used for practice teaching.

4. Federal contract research centers identified by the Federal Office of Management and Budget (OMB).

Other Plant Assets. For management purposes, institutions are encouraged to inventory all physical plant assets. Examples of such assets not encompassed in the definition of a "building" include: uncovered swimming pools, athletic tracks, bleachers and additional playing fields that otherwise do not qualify as gross area. Institutions are also encouraged to itemize the infrastructure components. Examples include utility distribution systems (heating, cooling, power, water, and waste disposal) and support facilities which provide access or safety related services (roads, campus lighting, etc.). Additionally, institutions may wish to maintain inventory data on land holdings, capital equipment, and movable equipment.

Building Measurement Terms

In a building inventory, it is important to be able to determine the amount of space that can be assigned to people or programs. However, buildings necessarily contain other types of space as well. Technical definitions and examples of types of space are given in Chapter 4.

The amount of space that can be used for programs is known as the *Assignable Area.*[3] The Assignable Area of a room is the area measured within the interior walls of the room. Total Assignable Area of a building or in an inventory is the sum of the space allocated to the ten major room use categories: classrooms, laboratories, offices, study areas, special use space, general use areas, support rooms, health care, residential, and unclassified space. These categories are further identified below.

Assignable Area = Sum of the Ten Major Room Use Categories of Assignable Space

There are various kinds of other spaces within a building that are essential but which are not assigned directly to support programs. *Building Service Area* is the sum of all areas of a building used to support its cleaning and public hygiene functions. *Circulation Area* is the sum of all areas required for physical access to floors or subdivisions of space within the building, whether directly bounded by partitions or not. *Mechanical Area* is that area of a building designed to house mechanical equipment and utility services, and shaft areas. The sum of Building Service Area, Circulation Area, and Mechanical Area is known as the *Nonassignable Area* of a building.

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[3]This is also conventionally referred to as Net Assignable Area or Net Assignable Square Feet (NASF).

Nonassignable Area = Building Service + Circulation + Mechanical Areas

The aggregate interior area of a building, known as the *Net Usable Area*, is the sum of Assignable Area and Nonassignable Area.

Net Usable Area = Assignable Area + Nonassignable Area

It is also important to know that the *Gross Area* of a building is the floor area of a structure within the *outside* faces of the exterior walls. This value is either physically measured or scaled from as-built drawings.

The difference between the exterior or Gross Area and the interior or Net Usable Area is the *Structural Area*, the floor area upon which the exterior and interior walls sit and the unusable areas in attics and basements. Structural area may be calculated as the difference between the net usable area and the gross area of a building.

Structural Area = Gross Area - Net Usable Area

PRINCIPLES AND CODING STRUCTURES FOR ROOM INVENTORY AND CLASSIFICATION

Buildings typically contain numerous rooms used for a variety of purposes. Most of the detailed data on how space is used, by whom, for what purposes, and other important variables are linked to the inventory of rooms (or Assignable Space). This manual follows three well-established principles for this room or space inventory.

1. All assignable space should be allocated to one of ten standard room-use categories intended to encompass all postsecondary activities requiring assignable space.

2. In most instances, rooms will be coded to one of these categories based on primary use.

3. Additional coding structures may be used to derive other important statistics across all assignable space.

These principles of a room inventory are examined below.

Room Use Categories. All assignable space should be classified into one of the ten major use categories listed below. Each of these broad categories encompasses several sub-categories of more specialized uses (e.g., different types of laboratories). Coding of rooms is normally done at the level of subcategories and, as necessary, aggregated to the more general categories. The numerical codes along with the detailed technical definitions, descriptions, and limitations for each category and standard subcategory of room uses are provided in Chapter 5.

All assignable space should be classified according to the following ten major use categories.

Classrooms	General purpose classrooms, lecture halls, recitation rooms, seminar rooms, and other rooms used primarily for scheduled non-laboratory instruction.
Laboratory Facilities	Rooms characterized by special purpose equipment or a specific configuration that ties instructional or research activities to a particular discipline or a closely related group of disciplines.
Office Facilities	Offices and conference rooms specifically assigned to each of the various academic, administrative, and service functions.

Study Facilities	Study rooms, stacks, open-stack reading rooms, and library processing rooms.
Special Use Facilities	Military training rooms, athletic and physical education spaces, media production rooms, clinics, demonstration areas, field buildings, animal quarters, greenhouses and other room categories which are sufficiently specialized in their primary activity or function to merit a unique room code.
General Use Facilities	Assembly rooms, exhibition space, food facilities, lounges, merchandising facilities, recreational facilities, meeting rooms, child and adult care rooms and other facilities that are characterized by a broader availability to faculty, students, staff or the public than are special use areas.
Support Facilities	Computing facilities, shops, central storage areas, vehicle storage areas and central service space that provide centralized support for the activities of a campus.
Health Care Facilities	Facilities used to provide patient care (human and animal).
Residential Facilities	Housing facilities for students, faculty, staff and visitors to the campus.
Unclassified Facilities	Inactive or unfinished areas, or areas in the process of conversion.

Room Use Codes Are Assigned Based On Primary Use. Most rooms in an institution fall readily into one room use code. In some cases, however, individual rooms or groups of rooms have multiple uses (e.g., office and art studio).

If a room inventory system uses only a single code to indicate room use, the coding should be based on the primary use of the space. Thus, a room that is a laboratory by appearance or design but is currently being used primarily as a classroom is coded as a classroom rather than as a laboratory. As another example, a room equipped and used principally for research, but which also includes some occasionally used office space, should be coded as a laboratory facility.

Where multiple room use codes can be accommodated in the database, a system to prorate space may be used (see below). Primary use or proration also applies to the assignment of rooms to organizational units, functional areas, or academic discipline as discussed below.

Space May be Prorated by Institutions. It is recommended that a room's use, function, and organizational unit normally be coded on the basis of a single, primary classification. Where a room serves several purposes or users, however, the institution may choose to prorate and allo-

cate the square footage between two or more room uses, functions, organizational units, etc. For institutions with major sponsored research activities, proration of multiple use rooms may be necessary to identify accurately how each room is used. Proration can be done either on the basis of relative time expended on each activity or on the basis of the proportion of the area in the room dedicated to each activity.

There are numerous approaches to proration. One method is to prorate from floor plans by the insertion of "phantom walls," indicated by dashed lines or other artificial boundaries on floor plans to separate adjacent uses or assignments. The use of phantom walls requires that each part of the room be given a unique room identifier, which can be accomplished by adding an additional digit or character to the existing room identifier. For example, Room 210, which is used as a storage room by both Biology and Chemistry could be identified as Room 210A and Room 210B, and the prorata organizational assignment and share of space can be identified with each. Another method is to apply percentage figures to each use, function, etc. being prorated. Whatever method is used, the resulting information should be capable of summarization into standard room use codes and related categories for external reports, utilization studies, and institutional planning.

Service Codes Are Used For Associated Support Rooms. Many major room categories have minor supporting rooms associated with them. For example, an office may have a supply room or a laboratory may have a stock room. These supporting rooms are coded as service rooms, and their room use will follow the coding of the major rooms to which they provide service.

It is important to maintain the integrity of the concept of service codes in order to reduce the hundreds of support room use types to a small set of service codes. As described in Chapter 5, the use of a code ending in "5" to represent service space for a primary activity area, which has a corresponding code ending in "0" (e.g., 315 serves 310), adds power and flexibility to the room use classifications.

Actual Use Should Be Determined Prior To Coding. An accurate determination of the actual use of a room and its contained equipment should be made prior to coding. A room's actual use must meet the stated definition before an accurate coding can be made. For example, as outlined in Chapter 5, a "learning laboratory" may be either a 220-Open Laboratory or 410-Study Room, depending on whether the room contains discipline-restrictive equipment or configuration, as stated in the introduction to the 200 (Laboratory Facilities) series. If the learning laboratory contains microcomputer stations, for example, the machines must be restricted by installed software or accessory devices to a particular discipline or discipline group before the room can qualify as a laboratory. If the machines are configured for general use by students in a variety of course subjects, the microcomputers become synonymous with books as basic study tools and the 410-Study Room code is more appropriate.

Coding for Organizational Unit, Discipline, or Program. Information and coding schemes to identify the organizational unit, discipline or program to which a room (or space) is assigned are institution specific; that is, they are based on the institutionally-determined names or conventions

to identify the organizational unit (school, department, division, etc.) to which the room is assigned at the time of the inventory. Since these organizational structures and names vary across institutions, these data are not useful for interinstitutional comparisons or reporting. To overcome this lack of comparability, the 1973 FICM manual recommended the use of the HEGIS Taxonomy of Disciplines. This taxonomy has not been updated since 1970 and is no longer used by the National Center for Educational Statistics, although it continues to be used by many institutions and states for data collection, usually with some local adaptations or modifications to meet changing disciplinary areas and nomenclature. Other users have adopted the NCES Classification of Instructional Programs (CIP) or some local or state adaptation of these coding structures for academic fields or programs.

For external reporting and interinstitutional use of facilities inventory data, this updated manual recommends that the academic discipline coding scheme adopted by an institution be consistent with or capable of being "crosswalked" to the categories defined by the NCES Classification of Instructional Programs, as used for standard federal reporting. Appendix 3 provides the current Classification of Instructional Programs at the two-digit level. This crosswalk to standard instructional programs is applicable only for space assigned to appropriate academic functions (e.g., instruction, research, academic support) and not for nonacademic functional categories (e.g., student services, institutional support).

Use of Standard Functional Codes. In addition to Room Use Categories and organizational unit assignment, facilities inventory systems commonly contain a set of categories or codes to allocate space across functional areas (e.g., instruction, research, public service, academic support). This is used primarily to link space allocations to financial data or to institutional missions (e.g., the proportion of space used for public service) or to analyze and compare space allocations across institutions according to commonly used functional categories.

The taxonomy of functions recommended for this purpose, outlined in Table 1, is adapted from standard financial reporting categories. Appendix 2 provides the definitions for these categories as adapted from standard NACUBO financial reporting guidelines. Coding for function requires identification of the primary (or prorated) functional use of each room.

Some Kinds Of Rooms Can Have Many "Stations." The concept of stations is an important one for classrooms, laboratories and other similar space, since it can help determine the number of occupants the room is designed to accommodate. This information is vital for comparing designed capacity to actual utilization, or in assigning or scheduling the space.

Distinctive Architectural Features Can Be Noted. An optional data element with specific codes may be used to identify unique architectural characteristics or special utility services. This information is used in scheduling and maintenance planning. This is also important in understanding cost differences in initial construction, renovations, repairs, and operations.

While this coding can usually be determined from up-to-date drawings or the general knowledge of the physical plant staff, these characteristics may be difficult to identify from original designs or original as-built drawings and may require actual inspection of some facilities.

TABLE 1: Summary of Functional Categories[4]

- **1 Instruction**
  - 1.1 General Academic Instruction
  - 1.2 Vocational/Technical Instruction
  - 1.3 Special Session Instruction
  - 1.4 Community Education
  - 1.5 Preparatory/Remedial Instruction
- **2 Research**
  - 2.1 Institutes and Research Centers
  - 2.2 Individual and Project Research
- **3 Public Service**
  - 3.1 Community Services
  - 3.2 Cooperative Extension Services
  - 3.3 Public Broadcasting Services
- **4 Academic Support**
  - 4.1 Libraries
  - 4.2 Museums and Galleries
  - 4.3 Educational Media Services
  - 4.4 Academic Computing Services
  - 4.5 Ancillary Support
  - 4.6 Academic Administration
  - 4.7 Academic Personnel Development
  - 4.8 Course and Curriculum Development
- **5 Student Services**
  - 5.1 Student Services Administration
  - 5.2 Social and Cultural Development
  - 5.3 Counseling and Career Guidance
  - 5.4 Financial Aid Administration
  - 5.5 Student Admissions
  - 5.6 Student Records
  - 5.7 Student Health Services
- **6 Institutional Support**
  - 6.1 Executive Management
  - 6.2 Fiscal Operations
  - 6.3 General Administrative and Logistical Services
  - 6.4 Administrative Computing Services
  - 6.5 Public Relations/Development
- **7 Operation and Maintenance of Plant**
  - 7.1 Physical Plant Administration
  - 7.2 Building Maintenance
  - 7.3 Custodial Services
  - 7.4 Utilities
  - 7.5 Landscape and Grounds
  - 7.6 Major Repairs and Renovations
- **8 Scholarships and Fellowships**
  (Not used in Facilities Inventory)
- **9 Auxiliary Enterprises**
  - 9.1 Auxiliary Enterprises-Student
  - 9.2 Auxiliary Enterprises-Faculty/Staff
  - 9.3 Intercollegiate Athletics
- **10 Independent Operations**
- **11 Hospitals**

[4] This taxonomy is adapted from the *Financial Accounting and Reporting Manual for Higher Education* by NACUBO. For facilities inventory systems, the financial area of Scholarships and Fellowships has been dropped, and categories for Independent Operations and Hospitals have been added. See Appendix 2 for definitions.

Outline Of Building And Room Data Elements

Table 2 lists the recommended and optional items of information for each building and room in an inventory. These data elements are briefly outlined in this chapter. The technical definitions and coding structures are provided in Chapter 4 for buildings and Chapter 5 for rooms.

This list is intended to indicate and provide guidance on which data elements are generally viewed as most important and useful for institutional management or external reporting. Neither category should be viewed as prescriptive, and institutions typically vary in which data elements are included in their facilities inventory.

TABLE 2: Types of Building and Room Information

Recommended Data Elements	Optional Data Elements
Building Information	
Institutional Identifier	Location or Street Address
Site Identifier	Local Name
Building Identifier	Number of Floors
Ownership Status	Type of Construction
Estimated Replacement Cost	Landmark Status
Year of Construction	Original Building Cost
Year of Beneficial Occupancy	Cost of Latest Major Renovation
Year of Latest Major Renovation	Fixed Equipment
Disabled Access to Building	Building Service Area
Building Condition	Circulation Area
Gross Area	Mechanical Area
Assignable Area	Structural Area
Room Information	
Institutional Identifier	Local Room Name
Building Identifier	Suitability
Unique Space or Room Identifier	Room Architectural Features
Organizational Unit	Room Fixed Equipment
Assignable Area	Room Moveable Equipment
Room Use Category	
Academic Discipline	
Functional Use	
Number of Stations	
Disabled Access to Room	

Recommended Building Data Elements

Institutional Identifier	A code (such as the FICE code or IPEDS Unit-ID) that identifies the institution; may be used for reporting as part of a multi-institutional (comparative, state, or national) reporting effort.
Site Identifier	A code assigned by the institution to identify the unique physical description of the site where the building is located (e.g., "Main" or "West" campus.)
Building Identifier	A unique identifier assigned by the institution to the specific building (a unique building name or a code consisting of numbers or letters).
Ownership Status	The agency with which the ownership of the building resides (also may include data on the conditions of ownership, terms of a lease, etc.). Suggested codes are provided in Chapter 4.
Estimated Replacement Cost	Estimated building replacement cost at time of inventory.
Year of Construction	The year the construction of the building was completed.
Year of Beneficial Occupancy	The year the institution occupied the building.
Year of Latest Major Renovation	The year of the most recent renovation that cost 25% or more of the estimated replacement cost of the building and significantly extended its useful life.
Disabled Access to Building	Indication that there are no exterior site or architectural barriers to access to the building by a mobility-impaired person. Access to Building means the ability to physically approach and enter the building without assistance; floor accessibility is noted by the room accessibility data element. Requirements of the 1990 Americans with Disability Act (P.L. 101-336) specify that new facilities and renovated buildings must provide "a high degree of convenient access," if first occupancy is after January 26, 1993 or alterations were begun after January 26, 1992. Disabled students, employees, and the general public must be able to get to, enter, and use the institution's facilities. Compliance should be measured using the Uniform Federal Accessibility Standards or the ADA Accessibility

Standards, developed by the Architectural and Transportation Barriers Compliance Board. A summary of these standards is provided in Appendix 1.[5]

Building Condition — The physical status of the building at the time of the inventory. (See suggested categories in Chapter 4.)

Gross Area — The total floor area of the structure within the outside faces of the exterior walls.

Assignable Area — The sum of all areas on all floors of a building assigned to, or available for assignment to, an occupant or use, excluding spaces defined as building service, circulation, mechanical, and structural areas. This is also referred to as Net Assignable Square Feet (NASF).

Optional Building Data Elements

Location or Street Address — The specific location at which the structure can be found.

Local Name — The name commonly given to the building.

Number of Floors — The number of floors in the structure, including basements, attics, and roof-top structures that have assignable area.

Type of Construction — A code assigned by the institution to indicate the type of construction used in the building.

Landmark Status — Indication that the building is listed on the National Register of Historic Buildings or on some other official listing that limits the character of changes that can be made in the building's use or appearance.

Original Building Cost — The total original cost of the building to the institution.

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[5]See also the definitions for Disabled Access to Room provided below and the comprehensive regulations and definitions under the 1990 Americans with Disabilities Act (ADA). For example, see S.R. Colter, *Removing the Barriers: Accessibility Guidelines and Specifications*, Association of Higher Education Facilities Officers, Alexandria, VA, 1991.

Cost of Latest Major Renovation The dollar value of the latest renovation that cost in excess of 25% of the estimated replacement cost of the structure and that significantly extended its useful life.

Fixed Equipment Information assigned by the institution to indicate the presence of special fixed equipment such as chillers or elevators.

Building Service Area The sum of all areas of a building used to support its cleaning and public hygiene functions.

Circulation Area The sum of all areas required for physical access to some subdivision of space within the building, whether directly bounded by partitions or not.

Mechanical Area The portion of the gross area of a building designed to house mechanical equipment, utility services, and shaft areas.

NOTE: *Structural area*, which may also be included as an element, is a non-measured area calculated as the difference between gross area and the sum of assignable and nonassignable space. (See Chapter 4 definitions of building area components.)

Recommended Room Data Elements

Some items listed below are institutionally-defined data elements (e.g., building identifier and organizational unit) that are unique to the institution and not intended for external reporting. For other items (e.g., room use and functional categories), standard coding structures included in this manual are intended both to serve institutional data systems and to provide comparability in the data for interinstitutional use and external reporting.

Institutional Identifier A code or other means to indicate the campus or site of the building where the room is located. For use when institutional room data are reported as part of a larger multicampus system or statewide reporting effort.

Building Identifier The unique identifier determined by the institution for the building where the room is located. May be a unique name, number, letter, or combination of these.

Unique Space or Room Identifier A code assigned by the institution to identify the specific room. This code should incorporate the floor number.

Organizational Unit — An institutionally-determined name or code to identify the organizational unit to which the room is assigned at the time of inventory (e.g., school, department, division, etc.).

Assignable Area — The assignable floor area of the room, measured in assignable square feet or meters. This is the total floor area of the room available to the assigned occupant or use. If the space is prorated, assignable area should be proportionately allocated.

Room Use Category — Code indicating the classification of a room based on primary use or activity which occurs in the room at the time of the inventory. May be either a room use name or a numerical code or both. The standard classifications of room use and their definitions are outlined earlier in this section, and they are defined in detail in Chapter 5.

Academic Discipline — Identifies the academic unit field, discipline, or program area the room is assigned for space assignable to instruction, research, and academic support.

Functional Use — Identifies the function of space assigned to academic and support functions. (See Appendix 2 for codes.)

Number of Stations — Identifies the capacity of the room for selected room use categories where information about capacity (number of workstations, seats, or beds, for example) is useful in assigning or scheduling the space. The room use codes for which this information is useful includes: Classroom, Class Laboratory, Open Laboratory, Research/Nonclass Laboratory, Conference Room, Study Room, Open-Stack Study Room, Athletic Facility Spectator Seating, Assembly, Food Facility, Meeting Room, Patient Bedroom, Staff On-Call Facility, and Sleep/Study. (See Chapter 5.)

Disabled Access to Room — Indicates whether the room is barrier-free for its assigned use, normally through a simple notation for accessibility. This indicates that the room can be approached, entered, and used, without assistance, by a mobility-impaired person. Floor accessibility is, therefore, indicated by this notation at the room level. If the site and the building are not accessible, no notations of disabled access to rooms in that building should be made.

Optional Room Data Elements

Local Room Name

The name commonly given to the room, such as the "Anderson Hydraulic Laboratory," or the "Multi-discipline Teaching Laboratory." This is the locally used name for the room rather than the name of the room use category.

Suitability

Evaluation of the suitability or functionality of the room for its assigned use and function at the time of the inventory, based on the design, configuration and fixed equipment in the room. The evaluation of room suitability may change as its use, function or assigned organizational unit is changed. Detailed definitions for coding room suitability are presented in Appendix 5.

Room Architectural Features

Identifies the physical characteristics of the room which are built into its architectural design and which affect the assignment or use of the room. These include structural features such as high bay space or a sloped floor; and the type and amount of utility service provided. The coding of architectural features would not change, regardless of room use or function, unless the room was remodeled. Detailed definitions for coding room architectural features are presented in Appendix 4.

Room Fixed Equipment

Identifies special fixed equipment that allows the room to be used for specific purposes, such as a fume hood.

Room Movable Equipment

Identifies movable equipment assigned to a room. It is suggested that current practices set forth in OMB Circular A-21, A-110, and the like, be considered as guidelines here.

CHAPTER 3

GETTING STARTED

Many institutions already maintain sophisticated facilities inventories; others may not have collected facilities data or may find their inventories so out of date that they will wish to start over. This chapter is provided primarily for those who are starting fresh.

Designing The Database. In Chapter 2, some items of information are described as *recommended* (e.g., a unique space or room identifier, the area of the room, the organizational unit to /which it is assigned, and the room use category) while others are *optional* (e.g., physical characteristics of the room). In designing the facilities database, it is good practice to provide space for both the recommended and the optional data elements, even though not all the data may be collected at the outset.

Technological Alternatives. Electronic storage, maintenance, analysis and reporting of inventory data are now practical and cost-effective, even for the smallest institutions. Microcomputer, minicomputer, local or wide area network systems, or mainframes are accessible on most campuses; software to support inventories is available and can be modified inexpensively for particular institutional uses. Decentralization of computing resources through departmental, campus, regional and national networks is emerging as a common and cost effective means of making inventory information widely available.

The facilities inventory information for a small institution can usually be stored in a desk-top microcomputer, using database, spreadsheet, or word processing software. Larger institutions may wish to design their own system, utilize an available commercial system or package, or share a consortial or state-provided system. Mainframe or distributed environment systems should provide interfaces to individual workstation or microcomputer applications to enhance intrainstitutional uses.

Many institutions also may wish to use electronic technology to collect their facilities data. Options include developing and using machine readable data collection forms, entering the data directly using hand-held computers while conducting the physical inventory, and digitizing scaled floor plans.

Data Collection

Working From Drawings. On most campuses, the physical plant office or a department of facilities planning will have architectural drawings of most buildings. An initial set of building and room data can be compiled from these drawings, including assigning unique identifiers to each building and room, and scaling building and room dimensions from the drawings.

A growing number of institutions are setting up and maintaining building drawings in electronic (CAD) form, digitizing present drawings to set up those files. In the electronic form, these

drawings can easily be kept up to date with subsequent renovations. These electronic files can be linked with the inventory files so that both files can be updated simultaneously.

A word of caution: when scaling buildings from drawings as a way to get started, remember that photocopies of drawings may alter their scale. A sample of actual rooms should be checked to be sure the drawings are accurate to scale.

Walking The Campus. An essential step in an inventory is to check the configuration and use of each room. There may be discrepancies between the drawings and the actual buildings and rooms; this can be an opportunity to update the drawings. Furthermore, some recommended and optional room data should be ascertained or verified by inspection (e.g., the room use category, academic discipline category, number of stations, suitability for current use).

A regular schedule for updating facilities inventory data is also essential. Building dimensions may not change frequently, but room uses and room assignments are likely to change.

Partial Inventories. An incomplete building and room inventory is better than no inventory, provided it is accurate. Institutions beginning the inventory process may be wise to plan on collecting less information initially and increasing the scope of the inventory in subsequent updates to facilitate successful implementation.

There are several logical approaches:

1. Collect only the room identifiers, room use category, organizational assignments and area in the first inventory, leaving other elements for a later survey.

2. Collect data by class of facility, perhaps starting with classroom and laboratory buildings, then administrative ones, then auxiliaries and residential facilities.

3. Plan an ongoing program that will inventory or update a portion of all facilities each year.

Combining The Inventory With A Facilities Condition Audit. For many institutions, it will be cost-effective and advisable to combine their initial facilities inventory, and certainly any subsequent updates, with an audit of the condition of the facilities. The standard procedures for a facilities condition audit[6] closely follow those suggested in this manual and are intended to collect related information. Many of the building condition codes and room suitability codes suggested here relate closely to facilities condition audit information.

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[6]See, for instance, H.H. Kaiser, *Facilities Audit Workbook*, Association of Physical Plant Administrators of Universities and Colleges, Alexandria, VA, 1987.

Practical Tips

1. Compile the building information first, even though some variables or elements (such as assignable area) will not be available until the room inventory is completed.

2. Inventory all rooms in a particular building at one time. Interrupting the inventory process, even for short breaks, increases the chances of omitting rooms.

3. Try to schedule the room inventory shortly after the beginning of the term or other time when room uses have stabilized.

4. In counting the number of stations in a room, remember that the intent is to count the number of occupants who can appropriately be accommodated in the room.

   A. The number of stations in a laboratory is often determined by the fixed equipment in the room, such as sinks and counter space, or fume hoods. NOTE: where a station is designed to accommodate two or three students rather than just one, count the number of students who will be served.

   B. For classrooms with movable seating, the number of stations is determined by the design intent, not by the number of chairs that happen to be in the room at the moment the inventory is taken. For instance, a room may be designed to hold fifteen student stations but has only twelve chairs at the moment; the number of stations would be fifteen. Conversely, if current safety codes limit occupancy to fifteen and there are twenty chairs, the station count should be fifteen.

5. In conducting and maintaining the facilities inventory, remember that the intent is to provide the best information possible within a reasonable expenditure of effort. A modest level of error is tolerable (indeed inevitable) as uses and assignments change over time. A regular process for updating the inventory can keep its information fresh enough to be continuously useful.

6. Wherever possible, use the building and room identifiers to link the facilities file to other operational files, such as the physical assets files in the accounting office, the insurance files, the registrar's scheduling files, and so forth.

The Facilities Database And Institutional Management

Once a database has been designed and the building and room information has been collected, a variety of reports can be provided for institutional use and, where appropriate, for interinstitutional, system-wide or national surveys. The database also can support a variety of *ad hoc* inquiries to support space management and facilities management activities. For many purposes, graphical presentations can convey the intended message more effectively than tabular arrays of data. Possible uses for institutional planning and management include the examples listed below.

1. Reports by building:

   A. Detailed room-by-room listings for each building. This report will answer questions such as:

      i. What is the use of each room?
      ii. What is each room's floor area and number of stations?
      iii. To what institutional organizational unit is it assigned?

   B. Summaries for each building by room use category, by functional category, and by organizational unit. These summaries can answer such questions as:

      i. How many rooms of each room use category are there in the building? How many square feet of space are there in each room use category for that building?
      ii. How many rooms of each room use category are assigned to each organizational unit in the building?
      iii. How many rooms of each room use category are assigned to each academic discipline or functional category in the building?
      iv. How many square feet does each organizational unit have in the building?
      v. What is the ratio of assignable area to gross area in that building?

2. Reports by organizational unit (and/or by academic discipline and functional use):

   A. Detailed room-by-room listing for all rooms assigned to each organizational unit. This report can address such questions as:

      i. What rooms are assigned to this organizational unit, by room use category?
      ii. In what buildings are those rooms located?

   B. Summaries by room use category and by building. These summaries can answer questions such as:

      i. What is the total square feet assigned to the organizational unit, by room use category?
      ii. What is the total assignable area assigned to that unit?
      iii. How many of those square feet are located in each building?

3. Reports by room use category:

   A. Detailed room by room listings of all rooms in each room use category. This report can answer such questions as:

i. How many classrooms (or laboratories, or offices, etc.) does the institution have?
ii. What are the square feet and number of stations in each?

B. Summaries by room use category. This report can answer a question such as:

i. How many square feet of each room use category of space does the institution have?

4. Comparisons of the capacity of the facilities with their actual utilization. NOTE: these reports depend on being able to link the facilities files with current utilization records. These reports can answer such questions as:

A. For each type or size of classroom or laboratory, what percentages of the rooms are in use at each hour of the day? How many hours per week are certain rooms in use, and for what purposes? Are there "valleys" in the utilization pattern that could be better scheduled?

B. For classrooms or laboratories with different numbers of stations, what percentages of the stations are used at each hour? Where might more students be accommodated?

C. Based on standards or criteria the institution or system wishes to use, how many students (or weekly student contact hours) can be accommodated in the existing physical plant? Does the institution have enough space? Too much? What categories of space are needed to accommodate additional students or program changes?

5. Uses of the facilities inventory database for space management and facility management decisions, to answer such questions as:

A. What are the options for finding space for Professor "X"?

B. With the shift in enrollment patterns, can some of the space assigned to Department "Z" be made available to Department "Y"?

C. If I plan to repaint all classrooms every eight years but complete whole buildings one at a time, how can I best schedule all the buildings, knowing the number of classrooms and approximate square footage and stations available?

Other Intra- And Inter-Institutional Data Uses

When used for interinstitutional comparison and other external reporting, facilities data are unlikely to need much detail. Typical reports might contain the following:

1. Building data: A campus-by-campus summary of gross and assignable areas by ownership, condition and age.

2. Room data: A campus-by-campus summary of assignable area and number of rooms by room use category and by functional category.

See the sample format for data exchange in Appendix 7.

By combining facilities inventory data with other data sets (for example, data on enrollments, faculty and expenditures), a variety of space-use indicators and other types of analysis can also be provided. Some common combinations (or ratio indicators) include:

1. Total assignable square feet (ASF) per student. This ratio can be used within or across programs or institutions, taking into account different missions, the mix of undergraduate and graduate students, full-time and part-time student status and other factors.

2. ASF for specific categories of space (e.g., classroom, laboratory, study facilities) per student, program, etc.

3. ASF of residential facilities per student housed on campus.

4. ASF of office space per faculty or administrative staff member.

5. Research/nonclass laboratory space per faculty or in relation to research revenues and expenditures.

Many institutions find such indicators of space use valuable for planning, resource allocation and other purposes.

CHAPTER 4

BUILDING DEFINITIONS AND DATA ELEMENTS

This chapter provides the technical definitions, measurement procedures, and coding structures for building data elements. The interrelationships between these components of building area are illustrated by the conceptual framework in Figure 1. The technical definitions and codes for the room use categories are found in Chapter 5.

Definitions Of Building Areas[7]

The definitions and procedures provided in this chapter are intended to clarify and provide guidelines for the most commonly used types of data to be collected and compiled on buildings. These guidelines are based on the definitions and standards established during the 1960s for the Federal Construction Council and published by the National Academy of Sciences. The Federal Construction Council standards were intended for use by federal agencies, but they have been widely adopted and used by colleges and universities.

The definitions and guidelines in this chapter attempt to clarify and update some of the earlier standards by providing additional guidance on how to interpret and apply measurement procedures. The guidelines also are intended to establish a common standard for the minimum amount of data to be included in a building inventory in order to provide a database that is usable for both intra-institutional and inter-institutional purposes. *Institutions are not precluded by these guidelines from collecting additional building data or from including other types of structures in their facilities inventory.*

1. **Gross Area**

   A. *Definition:* The sum of all areas on all floors of a building included within the outside faces of its exterior walls, including floor penetration areas, however insignificant, for circulation and shaft areas that connect one floor to another.

   B. *Basis for Measurement:* Gross area is computed by physically measuring or scaling measurements from the outside faces of exterior walls, disregarding cornices, pilasters, buttresses, etc., which extend beyond the wall faces. Exclude areas having less than a six-foot, six-inch clear ceiling height unless the criteria of a separate structure are met. (See the sections in Chapter 2 on buildings to be included in the inventory.)

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[7]Source: Federal Construction Council Technical Report No. 50 (Publication 1235), *Classification of Building Areas*, National Academy of Sciences, Building Research Advisory Board.

FIGURE 1: Conceptual Framework for Analyzing Building Space

<table>
<tr><td colspan="12">Gross Area</td></tr>
<tr><td colspan="11">Net Usable Area</td><td rowspan="6">Structural Area is:

Residual Amount of Gross Less Net Usable</td></tr>
<tr><td colspan="11">Assignable Area</td></tr>
<tr><td colspan="10">Classified By: 1. Room Use Category</td><td rowspan="5">Nonassign-able Consists of:

1.Building Service Area

2.Circula-tion Area

3.Mechan-ical Area</td></tr>
<tr><td>Classroom</td><td>Laboratory</td><td>Office</td><td>Study</td><td>Special Use</td><td>General Use</td><td>Support</td><td>Health Care</td><td>Residential</td><td>Unclass-ified</td></tr>
<tr><td colspan="10">2. Academic Discipline, Institutional Unit Assignment, or Program</td></tr>
<tr><td colspan="10">Categories Determined by Institution
(For external data sharing and reporting, a "crosswalk" to the NCES Classification of Instruction Programs is recommended.)</td></tr>
<tr><td colspan="10">3. Standard Functional Codes</td></tr>
<tr><td>Instruction</td><td>Research</td><td>Public Service</td><td>Academic Support</td><td>Student Services</td><td>Institutional Support</td><td>Physical Plant O & M</td><td>Auxiliary Enter-prises</td><td>Independent Operations</td><td>Hospitals</td></tr>
</table>

Measured in terms of gross square feet (GSF),

Gross Area = Net Usable Area + Structural Space.

C. *Description:* In addition to all the internal floored spaces obviously covered above, gross area should include the following: excavated basement areas; mezzanines, penthouses, and attics; garages; enclosed porches, inner or outer balconies whether walled or not, if they are utilized for operational functions; and corridors whether walled or not, provided they are within the outside face lines of the building, to the extent of the roof drip line. The footprints of stairways, elevator shafts, and ducts (examples of building infrastructure) are to be counted as gross area on each floor through which they pass.

D. *Limitations:* Exclude open areas such as parking lots, playing fields, courts, and light wells, or portions of upper floors eliminated by rooms or lobbies that rise above single-floor ceiling height.

E. *Exception:* Include top, unroofed floor of parking structures where parking is available. (See the section on Parking Structures at the end of this chapter.)

2. **Assignable Area (Net Assignable Square Feet — NASF)**

A. *Definition:* The sum of all areas on all floors of a building assigned to, or available for assignment to, an occupant or specific use.

B. *Basis for Measurement:* Assignable area is computed by physically measuring or scaling measurements from the inside faces of surfaces that form the boundaries of the designated areas. Exclude areas having less than a six-foot, six-inch clear ceiling height unless the criteria of a separate structure are met. (See the section, Buildings To Be Included, in Chapter 2.)

Measured in terms of assignable square feet (ASF),

Assignable Area = Sum of Area Designated by the Ten Assignable Major Room Use Categories.

C. *Description:* Included should be space subdivisions of the ten major room use categories for assignable space — classrooms, labs, offices, study facilities, special use, general use, support, health care, residential and unclassified—that are used to accomplish the institution's mission.

D. *Limitations:* Deductions should not be made for necessary building columns and projections. Areas defined as building service, circulation, mechanical, and structural should not be included.

3. **Nonassignable Area**

A. *Definition:* The sum of all areas on all floors of a building not available for assignment to an occupant or for specific use, but necessary for the general operation of a building.

B. *Basis for Measurement:* Nonassignable Area is computed by physically measuring or scaling measurements from the inside faces of surfaces that form the boundaries of the designated areas. Excludes areas having less than six-foot, six-inch clear ceiling height unless the criteria of a separate structure are met.

Measured in terms of area,

Nonassignable Area = Sum of the Area Designated by Three Nonassignable Room Use Categories.

C. *Description:* Included should be space subdivisions of the three nonassignable room use categories—building service, circulation and mechanical—that are used to support the building's general operation.

D. *Limitations:* Deductions should not be made for necessary building columns and projections. Areas defined as assignable should not be included.

4. **Building Service Area**

A. *Definition:* The sum of all areas on all floors of a building used for custodial supplies, sink rooms, janitorial closets, and for public rest rooms. (NOTE: Building service area includes all areas previously classified as custodial area. Building service area also includes public rest rooms that were previously classified as mechanical area. Building Service Area does not include assignable areas (e.g., areas classified as 730-Central Storage and 870-Central Supplies are not part of Building Service Area).

B. *Basis for Measurement:* Building service area is computed by physically measuring or scaling measurements from the inside faces of surfaces that form boundaries of the designated areas. Exclude areas having less than a six-foot, six-inch clear ceiling height unless the criteria of a separate structure are met.

C. *Description:* Included should be janitor closets or similarly small cleanup spaces, maintenance material storage areas, trashrooms exclusively devoted to the storage of nonhazardous waste created by the building occupants as a whole, and public toilets.

D. *Limitations:* Deductions should not be made for necessary building columns and

minor projections. Areas defined as central physical plant shop areas, or special purpose storage or maintenance rooms, such as linen closets and housekeeping rooms in residence halls, should not be included. Does not include private rest rooms.

5. **Circulation Area**

A. *Definition:* The sum of all areas on all floors of a building required for physical access to some subdivision of space, whether physically bounded by partitions or not.

B. *Basis for Measurement:* Circulation area is computed by physically measuring or scaling measurements from the inside faces of surfaces that form the boundaries of the designated areas. Exclude areas having less than a six-foot, six-inch clear ceiling height unless the criteria of a separate structure are met.

C. *Description:* Included should be, but is not limited to, public corridors, fire towers, elevator lobbies, tunnels, bridges, and each floor's footprint of elevator shafts, escalators and stairways. Receiving areas, such as loading docks, should be treated as circulation space. Any part of a loading dock that is not covered is to be excluded from both circulation area and the gross building area. A loading dock which is also used for central storage should be regarded as assignable area and coded as central storage (730). Also included are corridors, whether walled or not, provided they are within the outside facelines of the buildings to the extent of the roof drop line.

D. *Limitations:* Deductions should not be made for necessary building columns and minor projections. When determining corridor areas, only spaces required for public access should be included. Restricted access private circulation aisles used only for circulation within an organizational unit's suite of rooms, auditoria, or other working areas should not be included.

6. **Mechanical Area**

A. *Definition:* The sum of all areas on all floors of a building designed to house mechanical equipment, utility services, and shaft areas.

B. *Basis for Measurement:* Mechanical area is computed by physically measuring or scaling measurements from the inside faces of surfaces that form the boundaries of the designated areas. Exclude areas having less than six-foot, six-inch clear ceiling height unless the criteria of a separate structure are met.

C. *Description:* Included should be mechanical areas such as central utility plants,

boiler rooms, mechanical and electrical equipment rooms, fuel rooms, meter and communications closets, and each floor's footprint of air ducts, pipe shafts, mechanical service shafts, service chutes, and stacks.

D. *Limitations:* Deductions should not be made for necessary building columns and projections. Areas designated as private toilets are not included.

7. **Net Usable Area**

A. *Definition:* The sum of all areas on all floors of a building either assigned to, or available for assignment to, an occupant or specific use, or necessary for the general operation of a building.

B. *Basis for Measurement:* Net usable area is computed by summing the assignable area and the nonassignable area.

Measured in terms of net usable square feet (NUSF),

Net Usable Area = Assignable Area + Nonassignable Area.

C. *Description:* Included should be space subdivisions of the ten assignable major room use categories and the three nonassignable space categories.

D. *Limitations:* Deductions should not be made for necessary building columns and projections. Areas defined as structural should not be included.

8. **Structural Area**[8]

A. *Definition:* The sum of all areas on all floors of a building that cannot be occupied or put to use because of structural building features.

B. *Basis for Measurement:* Precise computation by direct measurement is not possible under these definitions. It is determined by calculating the difference between the measured gross area and the measured net usable area.

Measured in terms of area,

Structural Area = Gross Area - Net Usable Area.

C. *Description:* Examples of building features normally classified as structural areas

[8]Referred to as "construction area" in TR-50.

include exterior walls, fire walls, permanent partitions, unusable areas in attics or basements, or comparable portions of a building with ceiling height restrictions, as well as unexcavated basement areas.

Other Building Information

1. **Estimated Replacement Cost**

   A. *Definition:* The estimated cost to replace the building at the time of inventory.

   B. *Basis for calculation:* Determined in terms of the cost to replace the building's gross floor area at current construction costs in accordance with current building and public safety codes, and standard construction methods. *The Engineering News Record*, R.S. Means[9], or Boeckh[10] are examples of frequently used sources of information for determining construction cost indices. The selected source of information should be locally determined. The replacement cost of *fixed* equipment in the building should be included.

2. **Condition**

   A. *Definition:* The physical status of the building at the time of the inventory or audit, based on the best judgment of those persons familiar with the physical characteristics and condition of the campus.

   B. *Derivation:* The most useful facilities management information is produced when the inventory or audit rates each subsystem of a building. This approach documents the building's overall composite rating and provides information about needed repairs or replacements. A facilities audit should tie subsystem and overall composite ratings to the estimated building replacement value to provide a rough estimate of the cost of rehabilitating or renovating the facility.[11]

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[9]R.S. Means Company, Inc., Construction Consultants and Publishers, publishes an historical cost index. In addition, the Commercial/Industrial/Institutional section of one of the Means' manuals contains base building costs per square foot or floor area for seventy model buildings.

[10]The Boeckh Division of the American Appraisal Company computes a construction cost index that appears applicable to the mix and types of buildings found on college and university campuses. The index is reported in the *Higher Education Price Indexes* by Research Associates of Washington (Washington, D.C.).

[11]For a simple approach to procedures and categories rating facility subsystems, see Kaiser, H.H., *Facilities Audit Workbook: A Self-Evaluation Process for Higher Education*, Alexandria, VA, 1987, Association of Physical Plant Administrators of Universities and Colleges.

C. *Description:* Building condition has the following categories:

i.	Satisfactory	Suitable for continued use with normal maintenance.
ii.	Remodeling - A	Requires restoration to present acceptable standards without major room use changes, alterations, or modernizations. The approximate cost of Remodeling-A is not greater than 25% of the estimated replacement cost of the building.
iii.	Remodeling - B	Requires major updating or modernization of the building. The approximate cost of Remodeling-B is greater than 25%, but not greater than 50% of the estimated replacement cost of the building.
iv.	Remodeling - C	Requires major remodeling of the building. The approximate cost of Remodeling-C is greater than 50% of the replacement cost of the building.
v.	Demolition	Should be demolished or abandoned because the building is unsafe or structurally unsound, irrespective of the need for the space or the availability of funds for a replacement. This category takes precedence over categories i-iv. If a building is scheduled for demolition, its condition is recorded as Demolition, regardless of its condition.
vi.	Termination	Planned termination or relinquishment of occupancy of the building for reasons other than unsafeness or structural unsoundness, such as abandonment of temporary units or vacating of leased space. This category takes precedence over categories i-iv. If a building is scheduled for termination, its condition is recorded as Termination, regardless of its condition.

3. **Building Ownership Status**

A. *Definition:* The type of ownership and relation of title holder to institution.

B. *Description:* The following categories illustrate types of ownership status; these may also be used as codes for ownership status in the facilities inventory data base.

i. Owned in fee simple.

ii. Title vested in the institution and being paid for on an amortization schedule (regardless of whether the building is shared with another institution or organization).

iii. Title vested in a holding company or building corporation to which payments are being made by the institution; title will ultimately pass to the institution (includes lease-purchase arrangements).

iv. Not owned by the institution, but leased or rented to the institution at a typical local rate.

v. Not owned by the institution, but made available to the institution either at no cost or at a nominal rate.

vi. Not owned by the institution, but shared with an educational organization that is not a postsecondary institution.

vii. Not owned by the institution, but shared with another postsecondary educational institution.

viii. Other (e.g., not owned by the institution, but shared with a noneducational institution).

Note: For some institutional purposes and external sharing of data, it may be appropriate to collapse categories v through viii into a single category of "Other, not owned by the institution, including facilities shared with other entities."

Parking Structures

Due to the absence of guidance in previous editions of this manual, parking structures or decks are classified differently by institutions across the country. Because these structures may represent a large portion of campus facilities space, the specific method for classifying these areas can have significant impacts on campus-level statistics. For interinstitutional comparisons and surveys, it is recommended that parking structure data, if considered important to the study, be maintained and reported separately on a predefined and agreed upon basis. Three different methods of classifying parking structures currently prevail:

1. Classification With Assignable And Gross Square Footage

This method determines statistics for the structure which are commensurate with all other major inventoried campus buildings (i.e., assignable space, gross square footage, estimated replacement cost, etc.). Standard nonassignable areas (building service, circulation, and mechanical) are appropriately classified, and parking space square footage is assigned the 740-Vehicle Storage Facility room use code. Other standard assignable areas (offices, etc.) are classified with the appropriate room use codes. Ramps and other driving areas are classified as nonassignable circulation areas; upper level unroofed parking areas are classified as assignable (see 740) space.

2. Classification With Gross Square Footage Only

Many institutions maintain only building-level data for parking structures and do not classify parking areas as assignable space. Instead, parking areas are classified as nonassignable space. Standard assignable areas within the parking structure, such as offices, may be appropriately classified. Only the gross area recorded within the building file becomes a significant square footage statistic. Institutions may also maintain parking structure data separately from the formal building and room inventory files.

3. Classification With Neither Gross Nor Assignable Square Footage

Under this system, parking decks are considered as part of the campus infrastructure and are managed with other "parking facilities." As a result, they are not classified as buildings, and neither gross nor assignable square footage data for these structures is defined within the campus building or room inventories. As with buildings, stadium seating, unroofed swimming pools, radio/TV towers, etc., parking decks are classified as a separate subcategory of "structure."

CHAPTER 5

ROOM USE CODES

The Room Use Category Structure

This chapter provides the technical definitions and codes for the Room Use Category Structure (RUCS) recommended by this manual as a major component of a building and room inventory system. The ten major room use categories of assignable space defined in this chapter (and the coding structure for these categories) are intended to provide necessary flexibility in coding room use at the institutional level and to provide appropriate comparability in reporting room uses across institutions.

The basic categories and principles of this Room Use Category Structure are consistent with those earlier editions of the *Facilities Inventory and Classification Manual*. Specifically:

1. The categories should encompass all types and uses of assignable area found in campus buildings. Although some uses of space may be of less interest than others, the omission of any space may lead to the inadvertent exclusion of important data. The code for "other" unspecified uses (see 590) should be used only as a category of last resort.

2. The coding system should provide meaningful and comparable summary data. That is, the definitions of room uses should be sufficiently specific to give reasonable assurance that all institutions will map or crosswalk comparable rooms to the same category.

3. The coding scheme should be sufficiently flexible to allow for *alternate* or *expanded* (through subcategories) *coding systems* that track more specific areas of assignable and (if desired) nonassignable space; these schemes may be developed and applied by various institutions according to choice. The coding system also should be sufficiently definitive to support logical collapsing, translation, or crosswalking from these optional room use classifications.

4. The structure should provide a dimension of standardization and compatibility for comparisons across institutions and states.

5. The entire focus of definitions is on the actual room (primary or predominant) *use* at the time of inventory. Room *intent*, *design*, *type*, *name*, *organizational unit assignment*, or *contained equipment* does not, therefore, affect the coding classification unless it is compatible with actual use.

In following these principles, this edition of the Room Use Classification Structure represents an update or modernization of the 1973 structure. Definitions have been made clearer, descriptions expanded, and limitations made more specific to delineate more clearly the differences among room uses. Because the original definitions were very logically conceived, most "new" uses still fit within the existing structure. As a result, few significant changes, additions, or deletions were necessary to keep the categories current.

Several of the basic concepts inherent in this classification structure require more detailed explanation, as provided below.

Primary Use

If a room inventory system is designed for only one room use code for a room or area, application of the principle of *primary use* is recommended. For a room that is used as both an Office (310) and a Research/Nonclass Laboratory (250), a single determination according to primary use should be made. It is recommended that *primary* be evaluated in terms of *time*, the human activity element which focuses on *use*, rather than *space*. In the event that time of use is not available, the amount of space allocated to each activity or function should be the determining factor. Where multiple room use codes are accommodated in a system, prorations may be used (see the discussion of proration in Chapter 2). Institutional facilities inventory personnel should be accurate in determining the actual *use(s)* of the room in order to apply the correct code(s). Categorization by use is distinctly separate from the specific classification of a room by function (see Appendix 2) or academic discipline (see Appendix 3).

Service Codes

Support or service codes are used to reduce the hundreds of support room use categories to a small set of service codes. The use of a code ending in "5" to represent *support space* for a *primary activity* area, with a corresponding code ending in "0" (e.g., 315 serves 310), enhances both the analytic usefulness and flexibility of the room use coding structure.

Distinguishing *primary activity* areas from *service* areas may occasionally become difficult. Because it is impossible to describe comprehensively each code in the description section with examples of primary and service areas, a few "gray areas" for decision making will inevitably emerge with unlisted or "new" room names, designs and uses. Two paths to decision are suggested:

1. A close reading of the definition, description and limitations for both the primary (e.g., 710) and service (e.g., 715) codes. A thorough study of any examples listed could be especially helpful by revealing room relationships and function or use similarities.

2. Determining whether the existence of a particular room, with its specific functions and uses, is dependent upon, or justified by, another (usually nearby) room and its specific use. If this is not the case (the room is nondependent), the primary activity code is logically appropriate (e.g., a room containing a mainframe would be coded 710). If a significant degree of dependency exists (i.e., the room is largely justified only by the existence of another room), the service code is appropriate (e.g., a printout or tape storage room should be coded 715). In all such cases, a focus on room *relationships* can help clarify room use definitions, descriptions, and codes.

Room Name

Room name, whether colloquial or part of a formally applied syntax, can be useful to institutional users of the facilities room inventory. Reliance on local room names, however, can cause problems in applying correct room use categories. Depending on the room it serves, a "balance room," for example, can take any of three laboratory service codes; likewise, "storage" areas can fall into almost any service code category for the same reason and are only occasionally limited to the 730-Central Storage category.

The room's actual use must meet the stated definition before an accurate coding can be made. A room that is called the "old physics lab" should be coded as a laboratory *only* if it is used as a laboratory; if it is used, however, as an office storage area, then the room should be coded 315 (Office Service). Determination of the actual and current *use* of a room is necessary for accurate coding.

Local or colloquial room names may, nonetheless, be useful data elements for identifying many rooms and their locations. Institutions may choose to maintain the formal room use code names in this manual as a separate data element or, using supporting software in automated systems, generate the formal names based on the numerical codes (e.g., code 210 automatically generates the code name "Class Laboratory").

Local Options For Additional Codes

Room use codes represent the recommended central or core concepts for classifying the assignable space, *by use*, within campus facilities. An outline of room use codes is available in table 3. They do not attempt to meet the varied local institutional needs for tracking or defining space by physical design or characteristics, contained special equipment, specific person or organizational unit assignment, control authority, or discipline orientation. For example, no distinctions are made between:

1. Centrally controlled versus departmentally controlled classrooms.

2. Offices for research staff versus offices for instructors.

3. Study rooms with special study equipment or tools versus study rooms containing only tables and chairs.

4. Locker rooms serving a gym versus locker rooms serving a shop.

5. Private rest rooms serving an office versus storage rooms serving the same office.

Institutions may make such distinctions by "extending" the coding structure with interval or suffixed codes (i.e., for additional coding). It may be useful to modify the 410 code by the addition of a code 413 or 410M, for example, to track study rooms that are equipped with expensive microcomputers that are used as study tools. These additional codes may be aggregated back to the 410 as needed. A globally assigned suffix (e.g., "M") may even be used to flag *every* room containing one or more microcomputers. Locker rooms and private rest rooms, which are service areas with special physical characteristics, may just as easily be earmarked by selected, additional codes according to particular needs.

The coding structure separates specific room *use* from control by, or assignment to, any campus organizational unit or division, function, or academic discipline. Additional coding structures are frequently used for more specific classification of rooms in these categories. Special physical characteristics (see Appendix 4) and degrees of room suitability (see Appendix 5) are also more appropriately defined in separate classification systems.

For those institutions that have developed room *use* codes that tie to or include meanings within any of these separate classification systems, it is recommended that they develop and maintain a method of mapping or crosswalking to the core room use codes presented here. This recommendation, in the interest of standardization for interinstitutional comparisons and surveys, applies also to those institutions that have implemented coding extensions or completely alternate coding systems for classification by room use.

TABLE 3: OUTLINE OF ROOM USE CODES

100 CLASSROOM FACILITIES

110 Classroom
115 Classroom Service

200 LABORATORY FACILITIES

210 Class Laboratory
215 Class Laboratory Service

220 Open Laboratory
225 Open Laboratory Service
250 Research/Nonclass Laboratory
255 Research/Nonclass Laboratory Service

300 OFFICE FACILITIES

310 Office
315 Office Service

350 Conference Room
355 Conference Room Service

400 STUDY FACILITIES

410 Study Room

420 Stack

430 Open-Stack Study Room

440 Processing Room

455 Study Service

500 SPECIAL USE FACILITIES

510 Armory
515 Armory Service

520 Athletic Or Physical Education
523 Athletic Facilities Spectator Seating
525 Athletic Or Physical Education Service

530 Media Production
535 Media Production Service

540 Clinic
545 Clinic Service

550 Demonstration
555 Demonstration Service

560 Field Building

570 Animal Quarters
575 Animal Quarters Service

580 Greenhouse
585 Greenhouse Service

590 Other (All Purpose)

600 GENERAL USE FACILITIES

610 Assembly
615 Assembly Service

620 Exhibition
625 Exhibition Service

630 Food Facility
635 Food Facility Service

640 Day Care
645 Day Care Service

650 Lounge
655 Lounge Service

660 Merchandising
665 Merchandising Service

670 Recreation
675 Recreation Service

680 Meeting Room
685 Meeting Room Service

TABLE 3: OUTLINE OF ROOM USE CODES (CONT'D)

700 SUPPORT FACILITIES

710 Central Computer Or Telecommunications
715 Central Computer Or Telecommunications Service

720 Shop
725 Shop Service

730 Central Storage
735 Central Storage Service

740 Vehicle Storage
745 Vehicle Storage Service

750 Central Service
755 Central Service Support

760 Hazardous Materials
765 Hazardous Materials Service

800 HEALTH CARE FACILITIES

810 Patient Bedroom
815 Patient Bedroom Service

820 Patient Bath

830 Nurse Station
835 Nurse Station Service

840 Surgery
845 Surgery Service

850 Treatment/Examination
855 Treatment/Examination Service

860 Diagnostic Service Laboratory
865 Diagnostic Service Laboratory Support Service

870 Central Supplies

880 Public Waiting

890 Staff On-Call Facility

895 Staff On-Call Facility Service

900 RESIDENTIAL FACILITIES

910 Sleep/Study Without Toilet Or Bath
919 Toilet Or Bath

920 Sleep/Study With Toilet Or Bath

935 Sleep/Study Service

950 Apartment
955 Apartment Service

970 House

000 UNCLASSIFIED FACILITIES

050 Inactive Area

060 Alteration Or Conversion Area

070 Unfinished Area

NONASSIGNABLE AREA

WWW Circulation Area

XXX Building Service Area

YYY Mechanical Area

STRUCTURAL AREA

ZZZ Structural Area

Room Use Codes: Definitions, Descriptions, And Limitations

100 - Classroom Facilities

General

This category aggregates classroom facilities as an institution-wide resource, even though these areas may fall under different levels of organizational control. The term "classroom" includes not only general purpose classrooms, but also lecture halls, recitation rooms, seminar rooms, and other rooms used primarily for scheduled nonlaboratory instruction. Total classroom facilities include any support rooms that serve the classroom activity (e.g., 110 plus 115 as defined below). A classroom may contain various types of instructional aids or equipment (e.g., multimedia or telecommunications equipment) as long as these do not tie the room to instruction in a specific subject or discipline. (For treatment of such space, see 200-Laboratory Facilities).

Institutions may use extension codes to distinguish control over classroom areas, discipline use, type of instruction, contained equipment or other classroom variables (e.g., 120/125 departmental classroom). These extension codes should be capable of aggregation to total classroom space (110) as needed.

110 Classroom

Definition: A room used for classes and that is also not tied to a specific subject or discipline by equipment in the room or the configuration of the room.

Description: Includes rooms generally used for scheduled instruction that require no special, restrictive equipment or configuration. These rooms may be called lecture rooms, lecture-demonstration rooms, seminar rooms, and general purpose classrooms. A classroom may be equipped with tablet armchairs (fixed to the floor, joined in groups, or flexible in arrangement), tables and chairs (as in a seminar room), or similar types of seating. These rooms may contain multimedia or telecommunications equipment. A classroom may be furnished with special equipment (e.g., globes, pianos, maps) appropriate to a specific area of study, *if* this equipment does not render the room unsuitable for use by classes in other areas of study.

Limitations: This category does not include Conference Rooms (350), Meeting Rooms (680), Auditoria (610), or Class Laboratories (210). Conference rooms and meeting rooms are distinguished from seminar rooms according to primary use; rooms with chairs and tables that are used primarily for meetings (as opposed to classes) are conference rooms or meeting rooms (see room codes 350 and 680 for distinction). Auditoria are distinguished from lecture rooms based on primary use. A large room with seating oriented toward some focal point, and which is used for dramatic or musical productions, is an Assembly (610) facility (e.g., an auditorium normally used for purposes other than

scheduled classes). A class laboratory is distinguished from a classroom based on equipment in the room *and* by its restrictive use. If a room is restricted to a single or closely related group of disciplines by special equipment or room configuration, it is a laboratory (see 200 series).

115 Classroom Service

Definition: A room that directly serves one or more classrooms as an extension of the activities in that room.

Description: Includes projection rooms, telecommunications control booths, preparation rooms, coat rooms, closets, storage areas, etc., *if* they serve classrooms.

Limitations: Does not include projection rooms, coat rooms, preparation rooms, closets or storage areas, if such rooms serve laboratories, conference rooms, meeting rooms, assembly facilities, etc. A projection booth in an auditorium (not used primarily for scheduled classes) is classified as Assembly Service (615).

200 - Laboratory Facilities

General

A laboratory is a facility characterized by special purpose equipment or a specific room configuration which ties instructional or research activities to a particular discipline or a closely related group of disciplines. These activities may be individual or group in nature, with or without supervision. Laboratories may be found in all fields of study including letters, humanities, natural sciences, social sciences, vocational and technical disciplines, etc. Laboratory facilities can be subdivided into three categories: class, open, and research/nonclass laboratory. A class laboratory is used for *scheduled* instruction. An open laboratory supports instruction but is not formally scheduled. A research/nonclass laboratory is used for research, experimentation, observation, research training, or structured creative activity which supports extension of a field of knowledge. Institutions may wish to further distinguish various types of class, open, and research laboratories through the use of extension or special codes.

NOTE: Within comprehensive research universities, it is difficult to draw precise lines between instruction and research activities. At institutions with medical and health science programs, it is even more complicated because of the difficulty in distinguishing between patient care and instruction or research activities. The problem of joint activities makes the classification of space very difficult.

The complexity of "research" and how it may affect room use classification decisions needs discussion at the institutional level. In general, there are three categories of research activities: externally budgeted or funded projects or centers, and separately organized centers or projects that are funded from institutional resources; departmental research activities that are neither separately budgeted or organized; and creative and intellectual activities of faculty in some disciplines that are the equivalent of departmental research (e.g., visual and performing arts are common examples).

When this complexity exists, institutions may elect to use standard room use codes for laboratories, office space, etc., and rely upon the actual activities of the faculty and staff housed within the space to determine the distinction between instruction and research. The room inventory data elements include a designation of function as a separate code for each room. If combined with financial and activity information, the combination of function and room use code can accurately represent allocations of space for research more effectively and accurately than reliance upon only the room use code.

210 Class Laboratory

Definition: A room used primarily for formally or regularly scheduled classes that require special purpose equipment or a specific room configuration for student participation, experimentation, observation, or practice in an academic discipline.

Description: A class laboratory is designed for or furnished with equipment to serve the needs of a particular discipline for group instruction in formally or regularly scheduled classes. This special equipment normally limits or precludes the room's use by other disciplines. Included in this category are rooms generally called teaching laboratories, instructional shops, typing or computer laboratories, drafting rooms, band rooms, choral rooms, (group) music practice rooms, language laboratories, (group) studios, theater stage areas used primarily for instruction, instructional health laboratories, and similar specially designed or equipped rooms, *if they are used primarily for group instruction in formally or regularly scheduled classes.* Computer rooms used primarily to instruct students in the use of computers are classified as class laboratories if that instruction is conducted primarily in formally or regularly scheduled classes.

Limitations: Does not include Classrooms (110). Does not include informally scheduled or unscheduled laboratories (see 220). This category does not include rooms generally defined as Research/Nonclass Laboratories (250). It does not include gymnasia, pools, drill halls, laboratory schools, demonstration houses, and similar facilities that are included under Special Use Facilities (500 series). Computer rooms in libraries or used primarily for study should be classified as Study Rooms (410).

215 Class Laboratory Service

Definition: A room that directly serves one or more class laboratories as an extension of the activities in those rooms.

Description: Includes any room that directly serves a class laboratory. Included are projection rooms, telecommunications control booths, coat rooms, preparation rooms, closets, material storage (including *temporary* hazardous materials storage), balance rooms, cold rooms, stock rooms, dark rooms, equipment issue rooms, etc., if they serve class laboratories.

Limitations: Does not include service rooms that support classrooms (see 115), Open Laboratories (225), or Research/Nonclass Laboratories (255). Animal Quarters (570) and Greenhouses (580) are categorized separately.

220 Open Laboratory

Definition: A laboratory used primarily for individual or group instruction that is informally scheduled, unscheduled, or open.

Description: An open laboratory is designed for or furnished with equipment that serves the needs of a particular discipline or discipline group for individual or group instruction where 1) use of the room is not formally or regularly scheduled, or 2) access is limited to specific groups of students. Included in this category are rooms generally called music practice rooms, language laboratories used for individualized instruction, studios for

individualized instruction, special laboratories or learning laboratories if discipline restricted, individual laboratories, and computer laboratories involving specialized restrictive software or where access is limited to specific categories of students. For example, a computer laboratory with only engineering or CAD software or a computer-based writing laboratory available only to English Composition students would be classified as an open laboratory because of the restricted usage of the room for a particular discipline or discipline group. Rooms containing computer equipment that is not restricted to a specific discipline or discipline group are classified as Study Rooms (see 410).

Limitations: Laboratories with formally or regularly scheduled classes are Class Laboratories (210). This category also does not include rooms defined as Research/Nonclass Laboratories (250). A room that contains equipment (e.g., typewriters, microcomputers) which does not restrict use to a specific discipline or discipline group, and which is typically used at a student's convenience, should be classified as a Study Room (410).

225 Open Laboratory Service

Definition: A room that directly serves one or more open laboratories as an extension of the activities in those rooms.

Description: Includes only those rooms that directly serve an open laboratory. Included are projection rooms, telecommunications control booths, coat rooms, preparation rooms, closets, material storage (including *temporary* hazardous materials storage), balance rooms, cold rooms, stock rooms, dark rooms, equipment issue rooms, and similar facilities, if they serve open laboratories.

Limitations: Does not include service rooms that support classrooms (see 115), Class Laboratories (215), or Research/Nonclass Laboratories (255). Animal Quarters (570), Greenhouses (580), and Central Service (750) facilities are categorized separately.

250 Research/Nonclass Laboratory

Definition: A room used primarily for laboratory experimentation, research or training in research methods; or professional research and observation; or structured creative activity within a specific program.

Description: A research/nonclass laboratory is designed or equipped for faculty, staff, and students for the conduct of research and controlled or structured creative activities. These activities are generally confined to faculty, staff and assigned graduate students and are applicable to any academic discipline. Activities may include experimentation, application, observation, composition, or research training in a structured environment directed by one or more faculty or principal investigator(s). These activities do not include practice or independent study projects and activities which, although delivering "new knowledge" to a student, are not intended for a broader academic (or sponsoring)

community (e.g., a presentation or publication). This category includes labs that are used for experiments, testing or "dry runs" in support of instructional, research or public service activities. Nonclass public service laboratories which promote new knowledge in academic fields (e.g., animal diagnostic laboratories, cooperative extension laboratories) are included in this category.

Limitations: Student *practice* activity rooms should be classified under Open Laboratory (220). A combination office/music or art studio or combination office/research laboratory should be coded according to its primary use if only a single room use code can be applied. Determination also should be made whether the "studio" or "research lab" component involves developing new knowledge (or extending the application or distribution of existing knowledge) for a broader academic or sponsoring community (and not merely for the practitioner), or the activity is merely practice or learning within the applied instructional process. Primary use should be the determining criterion in either case. Does not include testing or monitoring facilities (e.g., seed sampling, water or environmental testing rooms) that are part of an institution's Central Service (750) system. Also does not include the often unstructured, spontaneous or improvisational creative activities of learning and practice within the performing arts, which take place in (scheduled) Class Laboratories (210) or, if not specifically scheduled, (practice) Open Laboratories (220). Such performing arts (and other science and nonscience) activities, which are controlled or structured to the extent that they are intended to produce a specific research or experimental outcome (e.g., a new or advanced technique), are included in the Research/Nonclass Laboratory (250) category.

255 Research/Nonclass Laboratory Service

Definition: A room that directly serves one or more research/nonclass laboratories as an extension of the activities in those rooms.

Description: Includes only those rooms that directly serve a research/nonclass laboratory. Included are projection rooms, telecommunications control booths, coat rooms, preparation rooms, closets, material storage, balance rooms, cold rooms, stock rooms, dark rooms, equipment issue rooms, temporary hazardous materials storage areas, and similar facilities, if they serve research/nonclass laboratories.

Limitations: Does not include service rooms that support classrooms (see 115), Class Laboratories (215), or Open Laboratories (225). Animal Quarters (570), Greenhouses (580), and Central Service (750) facilities are categorized separately.

300 - Office Facilities

General

Office facilities are individual, multi-person, or workstation space specifically assigned to academic, administrative, and service functions of a college or university. While some institutions may wish to classify all office space as Office (310), others may wish to differentiate academic, administrative, staff, secretarial, clerical, or student assistant offices, etc., by applying additional codes.

310 Office

Definition: A room housing faculty, staff, or students working at one or more desks, tables, or workstations.

Description: An office is typically assigned to one or more persons as a station or work area. It may be equipped with desks, chairs, tables, bookcases, filing cabinets, computer workstations, microcomputers, or other office equipment. Included are faculty, administrative, clerical, graduate and teaching assistant, and student offices, etc.

Limitations: Any other rooms, such as glass shops, printing shops, study rooms, classrooms, research/nonclass laboratories, etc., that incidentally contain desk space for a technician or staff member, are classified according to the primary use of the room, rather than an office. Office areas do not need to have clearly visible physical boundaries; examples include open reception areas and library staff areas which would not otherwise be classified as Processing Rooms (440). In such cases, logical physical boundaries (phantom walls) may be assigned to calculate square footage. An office is differentiated from Office Service (315) by the latter's use as a casual or intermittent workstation or service room. For example, a room with a microcomputer intermittently used by one or more people separately assigned to an office should be coded as Office Service (315). A combination office, studio or research/nonclass laboratory should be coded according to its primary use if multiple room use codes with prorations are not used. A receptionist room that includes a waiting area should be coded as Office (310).

315 Office Service

Definition: A room that directly serves an office or group of offices as an extension of the activities in those rooms.

Description: Includes file rooms, break rooms, kitchenettes serving office areas, copy and FAX rooms, vaults, closets, private rest rooms, records rooms, office supply rooms, first aid rooms serving office areas, student counseling rooms and testing (non-health and non-discipline-related) rooms, and open and private (restricted access) circulation areas.

Limitations: Waiting, interview, and testing rooms are included as office service if they serve a specific office or office area and not a classroom or laboratory; a student counseling (non-health) testing room should be coded as Office Service (315). A receptionist room that includes a waiting area should be coded as Office (310). Lounges which serve specific office areas and which are not generally available to the public should be coded as Office Service (315). Centralized mail rooms, shipping or receiving areas, and duplicating or printing shops that serve more than one building (or department or school, etc.) or that are campus-wide in scope should be classified Central Service (750).

350 Conference Room

Definition: A room serving an office complex and used primarily for staff meetings and departmental activities.

Description: A conference room is typically equipped with tables and chairs. Normally it is used by a specific organizational unit or office area, whereas Meeting Rooms (680) are used for general purposes such as community or campus group meetings not associated with a particular department. If a room is used for both conference and meeting room functions, then the room should be classified according to its principal use. A conference room is distinguished from facilities such as seminar rooms, lecture rooms, and Classrooms (110) because it is used primarily for activities other than scheduled classes. A conference room is intended primarily for formal gatherings whereas a lounge is intended for relaxation and casual interaction. This category includes teleconference rooms.

Limitations: Does not include classrooms, seminar rooms, lecture rooms (see 110), auditoria (see 610), departmental lounges (see 315), open lounges (see 650), and Meeting Rooms (see 680).

355 Conference Room Service

Definition: A room that directly serves one or more conference rooms as an extension of the activities in those rooms.

Description: Includes kitchenettes, storage rooms, telecommunications control booths, projection rooms, sound equipment rooms, etc., if they serve conference rooms.

Limitations: Excluded are service rooms that support meeting rooms (see 685) or offices (see 315).

400 - Study Facilities

General

Study space is classified into five categories: study room, stack, open-stack study room, processing room, and study service. Offices used for library activities are coded as office facilities. A study room may contain equipment or materials which aid the study or learning process (e.g., microcomputers, computer terminals, multimedia carrels, typewriters, records and tapes) and which do not restrict the room to a particular academic discipline or discipline group. Whereas a Study Room (410) may appear in almost any type of building on campus (e.g., academic, residential, student service), Stacks (420), Open-Stack Study Rooms (430), and Processing Rooms (440) are typically located in, but not limited to, central, branch, or departmental libraries. Identification of library space should be made through the use of function codes, and departmental space through the combined use of academic discipline and function codes.

410 Study Room

Definition: A room or area used by individuals to study at their convenience, which is not restricted to a particular subject or discipline by contained equipment.

Description: Includes study or reading rooms located in libraries, residential facilities, academic or student service facilities, study carrel and booth areas, and similar rooms which are intended for general study purposes. Study stations may be grouped, as in a library reading room, or individualized, as in a carrel. Study stations may include microcomputers, typewriters, computer terminals, microform readers, or other multimedia equipment. The category Study Room includes rooms commonly termed "learning labs" or "computer labs" if they are not restricted to specific disciplines by contained equipment or software. Study rooms are primarily used by students or staff for learning at their convenience, although access may be restricted by a controlling unit (e.g., departmental study room).

Limitations: Does not include Open Laboratories (220) that are restricted to a particular discipline or discipline group. This category also does not include Lounges (650) that are intended for relaxation and casual interaction.

420 Stack

Definition: A room used to house arranged collections of educational materials for use as a study resource.

Description: Stacks typically appear in central, branch, or departmental libraries and are characterized by accessible, arranged, and managed collections. Collections can include books, periodicals, journals, monographs, micro-materials, electronic storage media (e.g., tapes, disks, slides, etc.), musical scores, maps, and other educational materials.

Limitations: Does not include general storage areas for such materials that serve a particular room or area; such rooms would take the appropriate service code. Examples of these service rooms include tape storage rooms for language laboratories (see 225), book storage rooms for classrooms (see 115), music for general listening enjoyment (see 675). Also does not include collections of educational materials, regardless of form or type (i.e., from books to soils collections), which are for exhibition use as opposed to a study resource (see 620).

430 Open-Stack Study Room

Definition: A combination study room and stack, generally without physical boundaries between the stack and study areas.

Description: Seating areas include those types of station and seating arrangements described under Study Room (410). The stack areas of these rooms may include any of the educational material collections described under Stack (420).

Limitations: Does not include Study Rooms (410) which have no stack areas. Those stack areas that have only a few incidental chairs or other seating, without a formally arranged study seating area, should be coded Stack (420). Institutions may wish to separate and code the seating or study areas (see 410) and stack areas (see 420) into separate room records. As with Stack (420) and Processing Rooms (440), Open-Stack Study Rooms (430) appear primarily in central, branch, and departmental libraries.

440 Processing Room

Definition: A room or area devoted to processes and operations in support of library functions.

Description: A processing room is intended for specific library operations which support the overall library mission. Included are card, microfiche, and on-line catalog areas; reference desk and circulation desk areas; bookbinding rooms; on-line search rooms; multimedia materials processing areas; interlibrary loan processing areas; and other areas with a specific process or operation in support of library functions.

Limitations: Areas which serve both as office stations and processing rooms should be coded according to primary use. Small incidental processing areas in larger stack or study areas should be included within the larger primary activity category (see 410, 420, 430). Does not include typical support rooms that serve study and other primary activity areas, such as storage rooms, copy rooms, closets, and other service-type rooms (see 455). Acquisitions work areas with a primary office use should be classified as Office (310).

455 Study Service

Definition: A room that directly serves study rooms, stacks, open-stack study rooms, or processing rooms as a direct extension of the activities in those rooms.

Description: Includes storage rooms, copy rooms, closets, locker rooms, coat rooms, and other typical service areas that support a primary study facilities room (see 410, 420, 430, 440).

Limitations: Does not include Processing Rooms (440) that house specific library support processes and operations (e.g., bookbinding rooms, multimedia processing rooms).

500 - Special Use Facilities

General

This category includes several room use categories that are sufficiently specialized in their primary activity or function to merit a unique room code. Areas and rooms for military training, athletic activity, media production, clinical activities (outside of separately organized health care facilities), demonstration, agricultural field activities, and animal and plant shelters are included here. Although many of these special use facilities provide service to other areas, their special use or configuration dictates that these areas not be coded as service rooms.

510 Armory

Definition: A room or area used by Reserve Officer Training Corps (ROTC) and ancillary units for military training and/or instructional activities.

Description: Rooms that are obviously designed or equipped for use in a military training or instructional program, such as indoor drill areas, indoor rifle ranges, and specially designed or equipped military science rooms, are included in this category. Ancillary units may include special rifle and drill teams.

Limitations: Conventional room use types such as Classrooms (110), Class Laboratories (210), Offices (310), and Study Rooms (410) are designated as such, even though they are located in an armory building. Military supply and weapons rooms are coded Armory Service (515).

515 Armory Service

Definition: A room that directly serves an armory facility as an extension of the activities in that facility.

Description: This category includes supply rooms, weapons rooms, and military equipment storage rooms.

Limitations: Rooms directly serving conventional primary activity areas are classified with the appropriate corresponding service code (e.g., 115-Classroom Service, 215-Class Laboratory Service, 315-Office Service, and 455-Study Service).

520 Athletic Or Physical Education

Definition: A room or area used by students, staff, or the public for athletic or physical education activities.

Description: Includes gymnasia, basketball courts, handball courts, squash courts, wrestling rooms, weight or exercise rooms, racquetball courts, indoor swimming pools, indoor putting areas, indoor ice rinks, indoor tracks, indoor stadium fields, and field houses. This category includes rooms used to teach dancing and bowling only if they are part of the physical education instructional program.

Limitations: This room use code does not distinguish instructional from intercollegiate, intramural, or recreational use of these areas. Additional classification through function and academic discipline codes makes this distinction.

Classroom Facilities (100 series), Laboratory Facilities (200 series), Office Facilities (300 series) and other primary room use categories are coded as such, even though these areas may be located in an athletic or physical education building. Permanent spectator seating areas associated with athletic facilities are coded 523. Outdoor athletic areas, such as outdoor tennis and basketball courts, archery ranges, golf courses, and other outdoor fields, do not meet the definition of buildings and, therefore, are not assignable area. Recreational or amusement areas such as billiards rooms, game or arcade rooms, bowling alleys, table tennis rooms, ballrooms, chess and card playing rooms, and hobby and music listening areas are classified Recreation (670), if they are not used for instructional purposes.

523 Athletic Facilities Spectator Seating

Definition: The seating area used by students, staff, or the public to watch athletic events.

Description: Includes indoor permanent or fixed seating areas in gymnasia, field houses, ice arenas, covered stadia, natatoria, and cycling arenas.

Limitations: Does not include temporary or movable seating areas (e.g., movable bleachers). Outdoor permanent seating is not assignable space although it may contain assignable areas under it (e.g., locker rooms, offices, etc.).

525 Athletic Or Physical Education Service

Definition: A room that directly serves an athletic or physical education facility as an extension of the activities in that facility.

Description: Includes locker rooms; shower rooms; nonoffice coaches' rooms; ticket booths; and rooms for dressing, equipment, supply, storage, first-aid, skate-sharpening, towels, etc.

Limitations: Does not include public rest rooms which should be classified as nonassignable building service space. Rooms which directly serve offices, classrooms, laboratories, etc., are classified with the appropriate corresponding service code. Cashiers'

desks serving recreation facilities (see 670) are classified Recreation Service (675). Central ticket outlets serving multiple facilities or services are classified as Merchandising (660).

530 Media Production

Definition: A room used for the *production* or *distribution* of multimedia materials or signals.

Description: Includes rooms generally called TV studios, radio studios, sound studios, photo studios, video or audio cassette and software production or distribution rooms, and media centers. These rooms have a clearly defined production or distribution function that serves a broader area (e.g., department, entire campus) than would a typical service room.

Limitations: Does not include rooms that merely store media materials and equipment. Such rooms would be coded as Media Production Service (535) rooms if serving the primary production or distribution room (see 530), or the appropriate service category for the room(s) they serve. Radio or TV broadcasting areas and other media rooms used for teaching broadcasting to students for instructional purposes should be coded as laboratories (see 210, 220). This classification also does not include centralized computer-based data processing and telecommunications equipment facilities (see 710).

535 Media Production Service

Definition: A room that directly serves a media production or distribution room as an extension of the activities in that facility.

Description: The primary criterion here is that the room should serve a media production or distribution room and not another primary activity room. Examples include film, tape, or cassette libraries or storage areas; media equipment storage rooms; recording rooms; engineering maintenance rooms; darkrooms; preparation rooms; studio control booths; and other support areas that specifically serve a media production or distribution room (see 530).

Limitations: Those rooms containing media materials, equipment or operations which serve a primary activity room other than a 530 should be assigned the appropriate corresponding service code.

540 Clinic

Definition: A room used for providing diagnosis, consultation, treatment, or other services to patients or clients in facilities other than those separately organized health care facilities related to medicine, veterinary medicine, dentistry, or student health care.

Description: Included are patient or client examination rooms, testing rooms, and consultation rooms. Clinics are typically associated with such educational areas as psychology, law, speech, hearing, and similar areas.

Limitations: Does not include clinics associated with student health care, student counseling services, or clinics for the medical or dental treatment of humans or animals (see 800 series). Also does not include rooms used for remedial instruction which should be classified as classrooms or laboratories (see 100 and 200 series) or testing or counseling rooms in non-health or non-discipline-related programs (see 315).

545 Clinic Service

Definition: A room that directly serves a clinic facility as an extension of the activities in that facility.

Description: Included are waiting rooms, observation rooms, control rooms, records rooms, and similar supporting rooms.

Limitations: Does not include rooms that serve separately organized health care facilities (see 800 series). Also does not include first-aid treatment rooms that serve other primary activity areas (e.g., 525-Athletic Or Physical Education Service, 645-Day Care Service).

550 Demonstration

Definition: A room or group of rooms used to practice, within an instructional program, the principles of certain disciplines such as teaching, child care or development, and home management or economics.

Description: The key criterion here is practice activity within an instructional program which closely simulates a real-world or occupational setting. Includes demonstration day care and development centers, laboratory schools and home economics or management houses, when these facilities are used for practice as a part of collegiate training or instruction.

Limitations: Does not include day care and development centers which are not used as part of an instructional program (see 640). This category also does not include laboratories (see 200 series) that are used for direct delivery of instruction as opposed to practice. Demonstration schools, laboratory schools, day care centers, and home management houses in which students serve as the subjects for a research study are classified as Research/Nonclass Laboratories (250).

555 Demonstration Service

Definition: A room that directly serves a demonstration facility as an extension of the activities in that facility.

Description: Includes facilities generally called storerooms, pantries, etc., in a home-demonstration facility; and kitchens, lockers, shower rooms, etc., in a laboratory school. Similar support rooms which directly serve primary care and training areas in a demonstration day care center (see 550) are included in this category.

Limitations: Generally, the primary activity areas—such as kitchen, dining room, living room (in a home-demonstration house), or classrooms, laboratories, gymnasia that serve nursery, elementary, or secondary school students (in a laboratory school)—should be designated as Demonstration (550). Primary care and training areas in a (practice) day care center are also Demonstration (550) rooms. Kitchen and food preparation rooms in a demonstration day care facility are classified as service areas. Eating or break rooms for staff in demonstration day care centers are classified as service areas; eating or training rooms for children are classified as primary activity areas (see 550).

560 Field Building

Definition: A barn or similar agricultural structure used for animal shelters or for the handling, storage, or protection of farm products, supplies, vehicles, or implements.

Description: Includes barns, animal and poultry shelters, sheds, silos, feed units, and hay storage. Structures are typically of light-frame construction with unfinished interiors and are frequently located outside the central campus area. Also includes storage space for farm vehicles and implements. Service areas that support field buildings are classified within this category.

Limitations: Animal quarters directly supporting research or instructional laboratories should be coded 570. Location of a building, on or off the main campus, is not sufficient justification for classification as a field building. Finished rooms with other uses (e.g., laboratories, classrooms, etc.) should be coded as appropriate. Does not include buildings that house nonagricultural or nonfarm related vehicles (see 740).

570 Animal Quarters

Definition: A room that houses laboratory animals used for research or instructional purposes.

Description: Includes animal rooms, cage rooms, stalls, wards, and similar rooms for instruction and research.

Limitations: Animal Quarters are typically subject to the rules and regulations of agencies regarding the care and use of laboratory animals (e.g., requirements of the American Association for Accreditation of Laboratory Animal Care [AAALAC]). Does not include areas for treatment of veterinary patient animals (see Health Care Facilities-800 series).

Does not include agricultural field buildings sheltering animals that do not directly support instruction or research (see 560).

575 Animal Quarters Service

Definition: A room that directly serves an animal quarters facility as an extension of the activities in that facility.

Description: Includes feed storage rooms, feed mixing rooms, cage washing rooms, nonpatient surgery rooms, casting rooms, or instrument rooms.

Limitations: Does not include areas that directly serve facilities used for the treatment of veterinary patient animals (see Health Care Facilities-800 series).

580 Greenhouse

Definition: A building or room, usually composed chiefly of glass, plastic, or other light transmitting material, which is used for the cultivation or protection of plants or seedlings for research, instruction, or campus physical maintenance or improvement purposes.

Description: The primary criterion here is the combination of structural design as a greenhouse and the use for cultivation or protection. An example would be a greenhouse that serves as a laboratory or service area for a botany or vocational (e.g., horticulture) educational program. This category includes any facility serving the greenhouse function (e.g., warehouse facilities equipped with special lighting controls for the cultivation or protection of plants).

Limitations: Greenhouses that are not used for plant cultivation or protection should be classified according to specific use (e.g., a greenhouse used for central storage should be coded 730).

585 Greenhouse Service

Definition: A room that directly serves a greenhouse facility as an extension of the activities in that facility.

Description: Includes equipment or materials storage areas and rooms generally called headhouses.

Limitations: Excludes storage areas that do not directly serve greenhouses.

590 Other

Definition: A category of last resort.

Description: Included as a category of last resort to be used only for those rooms or facilities that cannot be described, even approximately, with other codes and definitions.

Limitations: Should have very limited use, if used at all.

600 - General Use Facilities

General

General use facilities are characterized by a broader availability to faculty, students, staff, or the public than are Special Use Facilities (500 series), which are typically limited to a small group or special population. General use facilities comprise a campus general service or functional support system (assembly, exhibition, dining, relaxation, merchandising, recreation, general meetings, day care) for the institutional and participant community populations.

610 Assembly

Definition: A room designed and equipped for the assembly of many persons for such events as dramatic, musical, devotional, livestock judging, or commencement activities.

Description: Includes theaters, auditoria, concert halls, arenas, chapels, and livestock judging pavilions that are used primarily for general presentations (speakers), performances (dramatic, musical, dance), and devotional services. Seating areas, orchestra pits, chancels, arenas, aisles, and stages (if not used primarily for instruction) are included in and usually aggregated into the assembly space. This category also includes chapels located in health care, residential, or other facilities. Institutions may wish to separate the seating area from the stage and other specially configured areas through the use of additional codes.

Limitations: Stage areas used *primarily* for instruction or practice (dance, music, drama) are typically coded separately as laboratory space (see 210, 220). Assembly facilities that are used primarily as instructional lecture halls are classified as Classroom (110) space.

615 Assembly Service

Definition: A room or area that directly serves an assembly facility as an extension of the activities in that facility.

Description: Includes check rooms, coat rooms, ticket booths, dressing rooms, projection booths, property storage, make-up rooms, costume and scenery shops and storage, green rooms, multimedia and telecommunications control rooms, etc.

Limitations: Entrance lobbies and other circulation areas outside of the primary assembly room are classified as nonassignable (circulation) space. A concession stand in an assembly facility is classified as Merchandising (660). Lounge areas that are remote from the assembly area within an assembly facility are classified by the appropriate service code or the Lounge (650) code.

620 Exhibition

Definition: A room or area used for exhibition of materials, works of art, artifacts, etc., and intended for general use by faculty, students, staff, and the public.

Description: Includes both departmental and institution-wide museums, galleries, and similar exhibition areas which are used to display materials and items for viewing by *both* the institutional population *and* the public. Planetariums used primarily for exhibition are also included in this category. Planetariums used primarily for research should be classified in the laboratory (200) series.

Limitations: Displays that are intended only for instructional purposes and not for general exhibitions (e.g., departmental instructional displays of anthropological, botanical, or geological specimens) should be classified as laboratory or laboratory service (see 200 series). Does not include bulletin boards and similar temporary or incidental displays in hallways, student centers, etc. Also does not include collections of educational materials, regardless of form or type (e.g., books, tapes, soils collections), which are for *study resource* as opposed to *exhibition* use (see 420).

625 Exhibition Service

Definition: A room that directly serves an exhibition facility as an extension of the activities in that facility.

Description: Includes preparation workrooms, storage rooms, vaults, etc., that serve general exhibition areas (see 620).

Limitations: Research areas in museums are classified as Research/Nonclass Laboratory (250) or Research/Nonclass Laboratory Service (255). Service areas for displays that are part of an instructional program are classified as classroom service or laboratory service areas.

630 Food Facility

Definition: A room used for eating.

Description: Includes dining halls, cafeterias, snack bars, restaurants, and similar eating areas, including such areas in residence halls, faculty clubs, etc. This category includes facilities open to students, faculty, staff, or the public at large. The primary distinction of a Food Facility (630) area is the availability of some form of accommodation (seating, counters, tables) for eating or drinking. This is, therefore, an area intended for the actual consumption of food and drink. Vending areas with seating, counters or tables and sit-down lunch or vending rooms that serve a shop facility are included in this category.

Limitations: Vending areas *not* provided with seating, counters or tables are classified as Merchandising (660) or with the appropriate service code if the vending directly supports or is adjacent to a specific room for consuming the products (e.g., a 635-vending room serving a 630-dining hall).

Lounges (650) with vending machines that are incidental to the primary use of the room (i.e., relaxation) are coded as part of the lounge, if within the room, or as Lounge Service (655) if separate from and directly supporting the main lounge facility (see 650). Break rooms serving specific office areas are classified as Office Service (315). Eating areas for children in demonstration or day care facilities are classified as primary activity categories within these respective areas (see 550, 640); staff-only eating or break rooms in these facilities are classified as service areas (see 555, 645).

635 Food Facility Service

Definition: A room that directly serves a food facility as an extension of the activities in that facility.

Description: Includes kitchens and other preparation areas, cold storage and freezer refrigeration rooms, dishwashing rooms, food serving areas, cleaning areas, etc. Includes first aid and vending areas directly serving food facilities, or adjacent to an eating area.

Limitations: Does not include any type of food preparation room which does not serve a food facility or eating area (see 630). Kitchenettes in residence facilities that do not serve a dining area are classified as Sleep/Study Service (935). Service areas for vending rooms (see 660) are classified as Merchandising Service (665). Kitchens and food preparation areas in demonstration or day care facilities are classified as service areas to those facilities (see 555, 645).

640 Day Care

Definition: A room used to provide day or night, child or elderly adult care as a nonmedical service to members of the institutional community.

Description: Includes all primary activity rooms that provide oversight, supervision, developmental training and general personal care for assigned children or adults (e.g., play areas, nonstaff eating areas, and child training rooms). This type of facility serves as a central service center for faculty, staff, and students, with members of the community being served as needed. This is not a medical care facility (i.e., medical attention is strictly limited to maintaining prescribed medication schedules and providing first aid).

Limitations: Does not include those support rooms (e.g., storage rooms, closets, and pantries) typically used as service rooms (see 645). This category also does not include

demonstration houses, laboratory schools or other facilities with a primary function of providing collegiate practice as part of the instructional process (see 550). Also excluded from this category are those service areas classified as Central Service (750), and Laboratory Facilities (200 series) that directly support instruction (e.g., vocational training programs for parent education and early childhood education).

645 Day Care Service

Definition: A room that directly serves a primary activity room in a day care facility as an extension of the activities in that room.

Description: Includes storage rooms, closets, kitchens, pantries, private or staff rest rooms, and other typical service rooms that support a primary activity area.

Limitations: Does not include those rooms (e.g., child training rooms, playrooms-see 640) where primary day care activities are conducted. Rest rooms designed for child training should be coded 640; staff-only rest rooms should be coded 645. Kitchen or food preparation areas in a day care facility are classified as service areas (see 645). Staff eating or break areas should be coded 645, whereas eating or training areas for children are classified as primary activity space (see 640). Staff office areas should be coded 310.

650 Lounge

Definition: A room used for rest and relaxation that is not restricted to a specific group of people, unit or area.

Description: A lounge facility is typically equipped with upholstered furniture, draperies, or carpeting, and may include vending machines. A general use lounge (see 650) differs from an office area or break room lounge (see 315) by virtue of its public availability. If a room is open for use by people visiting or passing through a building or area, it is coded Lounge (650). Such a room may have vending machines if the primary use of the room is rest, relaxation, informal socializing and not for eating (see 630).

Limitations: A lounge facility is distinguished from a Conference Room (350) and a Meeting Room (680), both of which are intended for formal meetings, by its more informal function of rest, relaxation or casual interaction *and* its public availability. A lounge area associated with a public rest room is included with the rest room as nonassignable (building service area) space. A room devoted to vending machines without accommodation (seating, counters or tables) for local food or drink consumption is classified as Merchandising (660). A lounge that directly serves a specific or restricted area is classified by the appropriate corresponding service code (e.g., a lounge serving an assembly facility is classified 615-Assembly Service). A lounge differs from a lobby (nonassignable circulation area) in placement, use, and intent. A lobby is generally located at a

major entrance with openings to hallways on more than one side; and although it may have seating furniture, it is designed more for walking through (or having standing conversations) than for sitting and relaxing. Separate waiting rooms in other than health care facilities are classified with the appropriate service code according to the room or area they serve. A receptionist room that includes a waiting area should be classified as Office (310). Public waiting areas in health care facilities are coded as 880.

655 Lounge Service

Definition: A room that directly serves a general use lounge facility.

Description: Includes kitchenettes, storage areas, and vending rooms that directly serve a general use lounge facility (see 650).

Limitations: This category does not include kitchenettes, storage rooms, and small vending areas that directly serve other room use types (e.g., a small vending area serving a dining hall eating area should be classified as 635-Food Facility Service).

660 Merchandising

Definition: A room used to sell products or services.

Description: Includes product and service sales areas such as bookstores, student supply stores, barber or beauty shops, post offices, campus food stores, walk-away vending machine rooms, and central ticket outlets servicing multiple facilities or activities.

Limitations: Does not include dining rooms, restaurants, snack bars, and similar Food Facilities (630). A vending machine room that directly serves a dining, lounge or other primary activity area is classified with the appropriate service code; a vending machine area within a general use lounge is included in the Lounge (650) space. Vending areas that include accommodations (seating, counters or tables) for consuming the products are classified as Food Facility (630). Meeting and conference rooms in hotels or motels are classified as Meeting Rooms (680). Sleeping rooms in hotels or motels are classified in the appropriate category of Residential Facilities (900 series). Cashiers' desks that serve a specific recreational facility or area are classified as service space for that area (see 670, 675). Day care centers used for practice within an instructional program are classified as Demonstration (550). Day care centers that are not part of such a program are classified under Day Care (640).

665 Merchandising Service

Definition: A room that directly serves a merchandising facility as an extension of the activities in that facility.

Description: Includes storage rooms and closets, sorting rooms, private rest rooms, and other support rooms if they directly serve a Merchandising (660) facility.

Limitations: Storage rooms, sorting rooms, and private rest rooms that do not serve a merchandising area should be classified using the appropriate service code for the corresponding room use type.

670 Recreation

Definition: A room used by students, staff or the public for recreational purposes.

Description: Includes exercise and general fitness rooms, billiards rooms, game and arcade rooms, bowling alleys, table tennis rooms, dance or ballrooms, chess rooms, card playing rooms, hobby rooms, TV rooms, reading (nonstudy) rooms, and music listening rooms that are used for recreation and amusement and not for instructional purposes. Recreation rooms and areas are used for relaxation, amusement-type activities, whereas Athletic Or Physical Education (520) facilities are typically used for the more vigorous pursuits within physical education, intercollegiate athletics, and intramural programs.

Limitations: Does not include gymnasia, basketball courts, weight rooms, racquetball courts, handball courts, squash courts, wrestling rooms, indoor swimming pools, indoor ice rinks, indoor tracks, indoor stadium fields, indoor golf and other areas primarily used for physical education, intramural or intercollegiate athletic activities (see 520). Outdoor athletic and physical education fields, courts, and other nonenclosed areas are also excluded because they are not building space. This category also does not include bowling alleys, dance rooms, or any other activity areas that are primarily used for instruction. Reading or media use rooms that are designed and intended as study rooms are also excluded from this category (see 410).

675 Recreation Service

Definition: A room that directly serves a recreation facility as an extension of the activities in that facility.

Description: Includes storage rooms, closets, equipment issue rooms, cashiers' desks, first aid, and other support areas that directly serve a Recreation (670) facility.

Limitations: Does not include kitchens, snack bars, or other Food Facilities (630) and Food Facility Service (635) areas. Locker rooms, shower rooms, ticket booths, dressing rooms, equipment rooms, and other areas directly serving Athletic Or Physical Education (520) facilities are classified as service rooms (see 525) to those facilities. Central ticket outlets serving multiple facilities or services are classified as Merchandising (660).

680 Meeting Room

Definition: A room that is used by the institution or the public for a variety of nonclass meetings.

Description: The key concept here is public availability. Conference Rooms (350) are often confused with meeting rooms because they are both primarily used for nonclass meetings. However, conference rooms are restricted service components of an office complex or used by office occupants of a specific area and are generally limited to staff meetings or other departmental nonclass activities. Although it may be assigned to a specific organizational unit, a meeting room is more available and open to study groups, boards, governing groups, community groups, various student groups, nonemployees of the institution, and various combinations of institutional and community members. Meeting rooms in institutional hotels or motels and other for-fee meeting rooms are included in this category.

Meeting rooms may be configured like classrooms (i.e., with participant focus to the front of the room), and may be equipped with a variety of furniture types (e.g., tables and chairs, lounge-type furniture, tablet armchairs, or a large table) in various combinations and arrangements.

Limitations: Rooms serving an office complex and used primarily for staff meetings are classified as Conference Room (350). Seminar and lecture rooms used primarily for scheduled classes are classified as Classroom (110). Rooms designed and equipped for the assembly of many persons for such events as dramatic, musical or devotional activities, etc., should be classified as Assembly (610).

685 Meeting Room Service

Definition: A room that serves a meeting room as an extension of the activities in that room.

Description: Includes kitchenettes, multimedia storage and control rooms, furniture storage rooms, and other support rooms that directly serve a meeting room.

Limitations: Does not include kitchenettes, storage rooms, and other support areas that serve a Conference Room (355) or Assembly Facility (615).

700 - Support Facilities

General

Support facilities, which provide centralized space for various auxiliary support systems and services of a campus, help keep all institutional programs and activities operational. While not as directly accessible to institutional and community members as General Use Facilities (600 series), these areas provide a continuous, indirect support system to faculty, staff, students, and the public. Support facilities are centralized in that they typically serve an area ranging from an entire building or organizational unit to the entire campus. Included are centralized areas for computer-based data processing and telecommunications, shop services, general storage and supply, vehicle storage, central services (e.g., printing and duplicating, mail, shipping and receiving, environmental testing or monitoring, laundry, or food stores), and hazardous materials areas.

710 Central Computer Or Telecommunications

Definition: A room used as a computer-based data processing or telecommunications center with applications that are broad enough to serve the overall administrative or academic primary equipment needs of a central group of users, department, college, school, or entire institution.

Description: A Central Computer or Telecommunications room may be one of a *group* of rooms which constitute a *center* for delivering computer-based data processing or telecommunications services to various levels of user groups. Although the ongoing *primary activity* of this category is tied more closely to equipment than human activity, these areas require technical support staff, and physical access may be restricted to these personnel. These central equipment rooms appear most frequently at the campus-wide and large organizational unit levels and are generally subject to environmental and security controls and procedures limiting users to electronic terminal, telephone or modem access. Includes central rooms housing computer or computers (e.g., large mainframe, minicomputers, etc.), peripheral input (e.g., data entry terminals, input tape or disk drives, data reading equipment, etc.) and output (e.g., printers, output tape or disk drives, etc.) devices. This category also includes rooms in a central computer complex which are primarily or exclusively dedicated to data or program code entry or job submissions through one or more terminals.

Computer-based telecommunications equipment rooms, ranging from micro-driven LAN (local area) to the larger PBX (private branch) network centers, including central rooms housing satellite signal reception or transmission equipment, should be assigned the 710 code. This equipment may be dedicated to data, audio or telephone, video or any combination of these electronic transmissions.

Limitations: Does not include office space (see 310) assigned to programmers, analysts, engineers, data entry personnel, and other technical staff even though these rooms usually contain an access terminal. Also does not include instructional laboratories and study rooms equipped with personal computers or terminals (see 210, 220, 410), or offices with data processing equipment used as office tools (see 310, 315). Personal computer or terminal work rooms and printer rooms that serve an office area should be coded Office Service (315). Small closet areas housing reception or distribution telecommunications equipment and wiring which are not used by technical or support staff on a regular basis (i.e., repair or modification only) should be classified as nonassignable mechanical space.

715 Central Computer Or Telecommunications Service

Definition: A room that directly serves a central computer or telecommunications facility as an extension of the activities in that facility.

Description: Includes paper and forms storage, off-line tape and disk storage, separate control or console rooms or booths, tool and parts rooms, bursting and decollating rooms, areas used to store only inactive support equipment (e.g., multiplexers, modems, spoolers, etc.), and separate areas used for delivering tapes or picking up printouts. Also includes the repair and assembly rooms that directly serve the central computer or telecommunications facility.

Limitations: Does not include office areas for personnel (e.g., technicians, engineers, analysts, programmers) assigned to the central computer facility (see 310), primary equipment (computer, I/O device) rooms (see 710), and office areas containing data processing or networking office service equipment or materials (see 310, 315). Also does not include rooms directly supporting study rooms (see 455) or laboratories (see 215, 225, 255) that contain special computer equipment used for study, instruction or research. A nonoffice workroom containing a remote printer or data/job entry terminal that is part of an office area, and not the central computer facility, should be coded Office Service (315). A printer room serving a general purpose terminal room in a dormitory should be classified as Study Service (455).

720 Shop

Definition: A room used for the manufacture, repair, or maintenance of products or equipment.

Description: Includes carpenter, plumbing, HVAC, electrical and painting shops, and similar physical plant maintenance facilities. This category also includes centralized shops for construction or repair of research or instructional equipment, and repair and maintenance of multimedia equipment and devices. Special purpose shops (e.g., glass

blowing, machining) supporting multiple rooms for scientific instruction and research are included in this category.

Limitations: Does not include instructional "shops" (i.e., industrial arts or vocational-technical shops used for instruction), which should be classified as Laboratory Facilities (200 series). Facilities used for producing and distributing multimedia materials and signals are classified as Media Production (530). Architectural and engineering drafting rooms serving the physical plant operation are classified as Office (310). Blueprint storage rooms are classified as Office Service (315). Small, incidental equipment repair, assembly or cleaning rooms that directly serve an adjacent or nearby primary activity room should be classified according to the appropriate corresponding service code. This category also does not include areas used for the repair and maintenance of institution owned vehicles (see 745) or rooms directly serving media production or distribution areas (see 535). Also excludes costume and scene "shops" serving theater areas (see 615). Greenhouses used for campus physical maintenance or improvements should be coded 580.

725 Shop Service

Definition: A room that directly serves a shop facility as an extension of the activities in that facility.

Description: Includes tool storage rooms, materials storage rooms, and similar equipment or material supply or storage rooms. Locker, shower, first aid, and similar nonpublic areas that serve the shop facility should be included.

Limitations: Does not include service areas for class laboratories (see 215) or research/nonclass laboratories (see 255). Also does not include vehicular repair facilities (garages) classified as Vehicle Storage Service (745). Blueprint storage rooms should be classified as Office Service (315). Rooms directly serving media production or distribution facilities are coded 535. Sit-down lunch or vending rooms that serve a shop facility are classified Food Facility (630).

730 Central Storage

Definition: A room or building that is used to store equipment or materials and that serves multiple room use categories, organizational units, or buildings.

Description: The concept of *central* or *general* is key to applying this code correctly. The vast majority of storage rooms on a campus are service rooms (e.g., 115, 215, 355, 615, etc.) that directly support a primary activity room or room group; for example, a paper storage room (see 315) can serve several offices (see 310) in an area. Service storage rooms are somewhat close to the areas they serve and are used more than occasionally. Central storage areas include areas commonly called warehouses, surplus stor-

age, central campus supply or storage and inactive storage. A storage room incidentally used to store janitorial supplies would remain in this category. It also includes storage rooms in a building or building area that serve multiple room use categories and which are used for general or surplus (e.g., furniture, equipment) collection or storage. The 730 code can usually be used for all storage areas that do not qualify as service rooms.

Limitations: Does not include a storage room directly serving a primary room use category or group of such rooms (i.e., a room that is clearly a service room). Also, this category does not include nonassignable area (circulation, building service, or mechanical areas). Offices within warehouses or other central storage buildings are coded as Office (310). Centralized food stores and laundries are classified Central Service (750).

735 Central Storage Service

Definition: A room that directly serves a central storage facility as an extension of the activities in that facility.

Description: Central storage service rooms are typically limited to support rooms associated with the transporting of materials in and out of large central storage facilities and warehouses. Storage rooms for hand trucks and other moving equipment, shelving storage, and other rooms supporting the central storage function are included.

Limitations: Only those rooms directly supporting the (usually) larger Central Storage (730) area should be classified with this code.

740 Vehicle Storage

Definition: A room or structure that is used to house or store vehicles.

Description: Includes structures, buildings, and rooms generally called garages, boathouses, and airplane hangars. The definition of "vehicle" is broadly interpreted here to include forklifts, moving equipment, and other powered transport devices or equipment.

Limitations: This category does not include unroofed surface parking lots. It also does not include structures that house or store farm vehicles and implements (see 560). (See final section of Chapter 4 for suggested classification of parking structures.)

745 Vehicle Storage Service

Definition: A room that directly serves a vehicle storage facility as an extension of the activities in that facility.

Description: Includes any areas or rooms directly serving a vehicle storage facility, such as storage rooms and areas used for maintenance and repair of automotive equipment, boats, airplanes, and other vehicles as defined in Vehicle Storage (740).

Limitations: Does not include shops as defined in Shop (720) above (e.g., carpenter, plumbing, electrical, painting, etc.). Offices within a Vehicle Storage facility should be classified as such (see 310).

750 Central Service

Definition: A room or area that is used for the processing, preparation, testing, or delivery of a complex-central or campus-wide support service.

Description: The central service delivery may be provided by special equipment, human activity, the special availability of space, or any combination of these elements. Includes centralized food stores and laundries which typically serve the occupants or activities of more than one building. Also includes central facilities for printing and duplicating services, central mail facilities, central shipping and receiving areas, and central environmental testing or monitoring facilities, if they serve the occupants and activities of more than one building. Institutions may wish to differentiate individual central services through the use of additional codes in this series. Most of these centralized areas have a campus-wide service scope.

Limitations: Does not include those rooms providing the above listed functions if they support other primary activity rooms in the same building. For example, a food storage area in a cafeteria should be coded 635; a laundry room in a residence hall should be coded 935; a copy or mail room in an office area is coded 315. Media Production (530) or distribution facilities and computer-based data processing and telecommunications equipment centers (see 710) are coded separately. Facilities used for the manufacture, repair or maintenance of products or equipment should be coded Shop (720). Central Storage (730) or supply facilities and Vehicle Storage (740) facilities also have separate codes.

755 Central Service Support

Definition: A room that directly serves a central service facility as an extension of the activities in that facility.

Description: Central Service Support rooms are typically limited to extension storage rooms for supplies, parts, and moving or nonactive equipment; and adjacent, directly supporting repair and maintenance areas.

Limitations: Offices within a central service area or complex should be coded Office (310). Centralized physical plant repair and maintenance facilities that do not directly support a Central Service (750) facility should be coded Shop (720).

760 Hazardous Materials

Definition: A centralized facility used for the storage, treatment, or disposal of hazardous or toxic waste materials.

Description: Hazardous or toxic materials include any materials which have been designated for specific or formal regulation or controls on the basis of a potential harm to plant or animal life. Includes facilities devoted to the treatment or disposal of toxic or hazardous waste.

Limitations: Does not include temporary storage or disposal sites located near or adjacent to instructional or research facilities (see 215, 225, 255).

765 Hazardous Materials Service

Definition: A facility that serves a centralized facility used for the storage, treatment, or disposal of hazardous or toxic waste materials.

Description: Includes those facilities that directly serve the Hazardous Materials (760) facility.

Limitations: Does not include facilities that serve temporary storage or disposal sites located near or adjacent to instructional or research facilities.

800 - Health Care Facilities

General

This series provides room use classifications for patient care rooms that are located in separately organized health care facilities: student infirmaries, teaching hospitals and clinics, and veterinary and medical schools. Room codes and definitions apply to both human and animal health care areas; excluded are clinic facilities located outside of separately organized health care facilities (see 540). Whereas the codes in this series are confined to the settings listed, these facilities usually house areas that are classified using applicable codes from the other use classification series (e.g., classroom, laboratory, office, special use, general use, supporting facilities, etc.).

810 Patient Bedroom

Definition: A room equipped with a bed and used for patient care.

Description: This category includes general nursing care, acute care, semiconvalescent and rehabilitative adult or pediatric bedrooms, intensive care units, progressive coronary care units, emergency bed care units, observation units, infant care nurseries, incubator units, wards, etc. Connected clothes closets may be aggregated with the 810 space or classified separately as 815. Stalls for animal patients are also included, although specific bedding areas may not be provided. Veterinary facility areas commonly called veterinary quarters, small or large animal ward, equine stall, bovine stall, etc., are included in this category.

Limitations: Student residence quarters should be classified with the Residential Facilities (900 series) codes. Staff on-call rooms for resting and sleeping are coded 890. Does not include nonpatient animal shelters used for farm animals (see 560) or nonveterinary school laboratory animals (see 570).

815 Patient Bedroom Service

Definition: A room that directly serves one or more patient bedrooms as an extension of the activities in those rooms.

Description: Included are linen closets, patient lounges, children's play rooms and any other service areas that are used primarily by patients as opposed to staff. Also includes small anterooms and closets connected to the patient bedrooms if these areas are not aggregated with the 810 space. Veterinary facility areas commonly called ward storage and groom rooms should be classified within this category.

Limitations: Excludes the small, connected clothes closets in patient bedrooms, which are included in the 810 space. Support areas that do not directly serve a patient bedroom or patient bedroom ward should be classified with the service code corresponding to the

primary activity area being served. Also not included are the utility, storage, medication preparation and other work rooms that serve a nurse station (see 835). Does not include feed storage or mixing rooms, cage washing areas, surgery, casting or instrument rooms that serve a laboratory animal quarters facility (see 575). Veterinary institution feed storage and food preparation rooms are classified as Nurse Station Service (835).

820 Patient Bath

Definition: A room containing patient bath and toilet facilities.

Description: Included in this category are toilet and bath facilities adjoining or in conjunction with patient bedrooms. These rooms may contain various configurations of toilet, tub, shower or commode facilities; individual types of Patient Bath (820) may be distinguished through the application of extension codes. Animal cleaning rooms in veterinary schools are included in this classification unless the cleaning rooms are specifically used for surgery preparation (see 845).

Limitations: Public rest rooms and private rest rooms serving areas other than patient bedrooms (e.g., 315, 835) are excluded. Special tub rooms used by nursing staff for cleaning patients are classified Nurse Station Service (835). Animal groom rooms should be coded 815.

830 Nurse Station

Definition: A room or area used by nurses or other patient care staff who are supervising or administering health care services.

Description: This is the primary workstation area used by nurses and other patient care staff; these personnel are typically assigned to a specific ward of the facility. Includes ward reception and admissions desks and records or charting work areas.

Limitations: Rooms that are used as offices should be classified appropriately (see 310).

835 Nurse Station Service

Definition: A room that directly serves one or more nurse station rooms as an extension of the activities in those rooms.

Description: Includes nurse lounges or break rooms, locker rooms, private staff rest rooms, utility rooms, storage (e.g., medications, supplies, etc.), formula and medication preparation areas, equipment sterilization and other work rooms directly serving the nurse station. Also includes special tub rooms, nourishment rooms and separate storage rooms for records and charts. Animal or poultry maintenance service rooms in veteri-

nary institutions, including tack rooms, horseshoeing rooms, food preparation and feed storage rooms, are also included in this category.

Limitations: Rooms used as offices should be classified appropriately (see 310). Pharmacy and other central supply areas are classified Central Supplies (870). Areas directly serving patient bedrooms are coded 815. Additional codes may be used to distinguish clean and soiled utility rooms, medication and nourishment rooms, etc., as needed.

840 Surgery

Definition: A room used for surgery.

Description: Included in this category are major and minor surgery rooms, delivery rooms and special procedures operating rooms (e.g., OB-GYN, ophthalmic operating rooms). These rooms are typically equipped with operating room tables, sterile lights, anesthesia machines and various types of monitoring equipment. Institutions may wish to distinguish specific types of surgery or operating rooms through extension coding. Also includes rooms in veterinary facilities typically referred to as large animal surgery, small animal (includes poultry) surgery, bovine surgery, bull surgery, etc.

Limitations: Does not include the various surgery support rooms that are used as a direct extension of surgery activities (see 845). Also does not include rooms used for the minor invasive procedures (e.g., blood withdrawal, cardiac catheterization) of the diagnostic examination process (see 850).

845 Surgery Service

Definition: A room that directly serves a surgery room as an extension of the activities in that facility.

Description: Included are recovery rooms, labor rooms, special support equipment rooms (e.g., anesthesia, heart, lung, X-ray, etc.), dictation booths, scrub-up rooms, gown rooms, locker rooms, instrument cleanup and storage rooms, sterile supply storage rooms, patient (surgery preparation) cleaning rooms, monitor rooms, gas and gurney storage areas, postoperative and operating room repair rooms, clean and dirty linen areas, and animal holding rooms if these rooms directly serve the surgery facility.

Limitations: Storage and other support rooms that do not directly serve a Surgery (840) facility should be classified with the appropriate service room category. Rooms used for the direct implementation of surgical procedures are classified Surgery (840).

850 Treatment/Examination

Definition: A room used for diagnostic and therapeutic treatment.

Description: Included are rooms used for radiology, fluoroscopy, angiography, physical and occupational therapy, dialysis, body (e.g., CAT, MRI, ultrasound) scanning, cardiac catheterization, pulmonary function and vascular testing, EEG, ECG, EMC, EMR, linear acceleration, and dental examination and treatment. Also includes combined doctor's office and treatment/examination rooms. In veterinary institutions, rooms commonly called isolation treatment, small or large animal treatment, small or large animal X-ray, swine treatment, etc., are included.

Limitations: Does not include rooms used for the more radically invasive treatment procedures of surgery (see 840). Treatment/Examination (850) diagnosis differs from Diagnostic Service Laboratory (860) testing and diagnosis in that the former requires the presence of the patient.

855 Treatment/Examination Service

Definition: A room that directly serves a treatment/examination room as an extension of the activities in that facility.

Description: Included are dressing rooms, X-ray and film reading or viewing rooms, film processing rooms, dark rooms, work preparation areas, equipment and supply storage areas, sound proof rooms, patient dressing rooms, and clean and dirty linen rooms if these areas directly serve the primary activity treatment/examination facility. Also includes rooms in veterinary institutions commonly called animal holding, swine holding pen, etc., if these areas serve a treatment/examination area.

Limitations: Does not include service areas for diagnostic service laboratories (see 860, 865), which typically support the entire health care facility. Primary activity rooms that are used to deliver therapeutic and diagnostic treatment should be coded Treatment/Examination (850). Treatment or examination waiting rooms are classified as Public Waiting (880) facilities.

860 Diagnostic Service Laboratory

Definition: A room used to provide diagnostic support services to an entire health care facility.

Description: Includes pathology, pharmacy, autopsy, isotope rooms or labs, etc., providing such services as hematology, chemistry tissue, bacteriology, serology, blood bank and basal metabolism. Also includes areas commonly termed canine, feline, poultry, bovine or equine necropsy rooms in veterinary institutions.

Limitations: Laboratories used primarily for instructional purposes should be classified with the Laboratory Facilities (200) series. Rooms used for diagnostic and therapeutic examination or treatment of patients should be classified as Treatment/Examination (850) facilities.

865 Diagnostic Service Laboratory Support

Definition: A room that directly serves a diagnostic service laboratory as an extension of the activities in that facility.

Description: Included are cadaver storage rooms, morgues, autoclave and centrifuge rooms, warm and cold rooms, locker, scrub-up and gown rooms, special processing rooms, and supply and storage areas that directly serve one or more diagnostic service laboratories. Also includes carcass refrigerators and other areas with the above service functions in veterinary institutions.

Limitations: Does not include storage areas, dressing rooms, work preparation rooms and other areas that support a patient treatment or examination room (see 855).

870 Central Supplies

Definition: A room used centrally to store health care supplies in a health care facility.

Description: This classification, which serves a *central* storage or supply function similar to the Central Storage (730) classification, applies only to health care materials and supplies in a health care facility. Storage is relatively inactive in comparison to (usually smaller) standard service rooms. Included are pharmacy supply and storage rooms, dispensary areas and central linen storage rooms. Additional codes may be used by institutions that wish to differentiate among the specific materials being stored.

Limitations: Does not include central storage areas for materials or equipment which is not directly health care related (e.g., furniture, office equipment); such areas should be classified Central Storage (730). Linen closets that serve nurse stations and other limited scope service areas should be classified with the appropriate service code.

880 Public Waiting

Definition: A room used by the public to await admission, treatment or information within a health care facility.

Description: Included are lobby areas that are specifically configured and furnished for public waiting; physical boundaries should be assigned, as needed, to define nonassignable areas of entrance lobbies which simply serve a circulation function. Also includes patient waiting rooms, reception and visiting areas, viewing rooms and ward day rooms.

Limitations: Open lounges (see 650) and other service room lounges (e.g., patient lounge—see 815) should be classified appropriately. Only areas specifically assigned to public waiting, for admission, treatment or information, should be classified with this code.

890 Staff On-Call Facility

Definition: A room or quarters used by health care staff to rest or sleep while on-call to assigned duties within a health care facility.

Description: Includes areas or rooms used by doctors, nurses, emergency medical technicians, flight care crews, etc., to rest or sleep while on-call to specific duties within the facility.

Limitations: Staff on-call rooms or quarters differ from open and service area lounges (see 650) in that specific provisions are made for sleeping, and use is restricted to staff who typically work a long shift. Bedrooms for patients should be coded 810; student residence quarters should be classified with the Residential Facilities (900 series) codes.

895 Staff On-Call Facility Service

Definition: A room that directly serves a staff on-call room as an extension of the activities in that facility.

Description: Includes kitchens, baths, laundry rooms, lounges, closets, storage rooms, and other service areas that directly serve the on-call quarters.

Limitations: Does not include storage and other support rooms that serve patient bedrooms (see 815). Also excluded are central supply areas (see 870).

900 - Residential Facilities

General

Residential facilities include housing for students, faculty, staff, and visitors to the institution. Hotel or motel and other guest facilities are included in this series if they are owned or controlled by the institution and used for purposes associated with defined institutional missions (i.e., excluding commercial investment).

Note: Not all space in residential facilities is coded using the 900 series. Conventional primary activity and service codes, as with libraries, apply to specific areas. Included are Offices (310), Lounges (650), Study Rooms (410), dining areas (see 630), recreational rooms (see 670), and their corresponding service codes. Service rooms that typically appear in residential facilities are specified in the Sleep/Study Service (935) description.

910 Sleep/Study Without Toilet Or Bath

Definition: A residential room for one or more individuals typically furnished with bed(s), wardrobe(s), closet(s), desk(s), and chair(s), *without* an internally connected bath, toilet, or either.

Description: Includes single or multiple sleep/study rooms. A sleep/study facility may be a room for combined sleep/study, a room exclusively for sleeping, or a room for living and study. Connected closets are considered part of the room.

Limitations: Study rooms for general use, available and open to the dormitory residents at large, and not part of bedroom or sleeping room suites, should be classified as Study Room (410). Residential quarters equipped with internal cooking facilities are coded Apartment (950). Separate food preparation rooms serving sleep/study areas, including small kitchens used by the occupants, are coded Sleep/Study Service (935) unless there is an accompanying eating area (see 630) that the food preparation area directly serves. The appropriate service code of 635 would then be applied.

919 Toilet Or Bath

Definition: A toilet or bathroom intended only for the occupants of the residential facilities, rather than for the public.

Description: Includes common or shared bathroom facilities which may consist of full or half-bath, shower, or toilet and shower combinations, used by the residents and accessible from a corridor or other general circulation area.

Limitations: Does not include public rest rooms. Bathrooms internal to a sleep/study room (see 920), Apartment (950), or House (970) are included in those respective categories. Private rest room areas that serve offices are Office Service (315).

920 Sleep/Study With Toilet Or Bath

Definition: A residential room for one or more individuals, typically furnished with bed(s), wardrobe(s), closet(s), desk(s), and chair(s), *with* an internally connected bath or toilet.

Description: Includes single or multiple sleep/study rooms with bath facilities internal to the suite and not separately classified Toilet Or Bath (919). A sleep/study facility with toilet or bath may be a room for combined sleep/study, a room exclusively for sleeping, or a room for living and study, and includes connected closets. A sleep/study with toilet or bath facility, by definition, has a private toilet or bath that is accessible without having to go out to a hallway or other general circulation area. Suites may have a study and living room which is private to the residents of the suite area. These areas are included as part of the Sleep/Study With Toilet Or Bath (920) space.

Limitations: Study rooms for general use, available and open to the dormitory residents at large, and not part of bedroom or sleeping room suites, should be classified as Study Rooms (410). Residential quarters equipped with cooking facilities are coded as Apartment (950). Sleep/Study Rooms Without Toilet Or Bath (910) and their corresponding external Toilet Or Bath (919) rooms are coded separately.

935 Sleep/Study Service

Definition: A room that directly serves the occupants of sleep/study rooms.

Description: This is the service code for the 910 and 920 residential facility categories. Includes mail rooms, laundry and pressing rooms, linen closets, maid rooms, serving rooms, trunk storage rooms, and telephone rooms that serve the occupants of sleep/study facilities. Kitchen or food preparation rooms that serve sleeping areas and do not serve an accompanying eating or dining area (see 630) are also classified as Sleep/Study Service (935).

Limitations: Does not include Offices (310), Lounges (650), Study Rooms (410), eating or dining areas (see 630), toilet/bath areas for occupants of Sleep/Study rooms (see 919), Recreation (670) areas or Meeting Rooms (680) in any residential facility, including institutionally controlled hotels or motels.

950 Apartment

Definition: A complete living unit, with private cooking facilities, that is not a separate structure.

Description: This is the basic module or group of rooms designed as a complete housekeeping unit (i.e., it contains bedroom(s), living room(s), kitchen, and toilet facilities). It is not intended that individual rooms be specifically identified within the apartment, but only that the total interior space be included. Includes apartments provided for faculty, staff, students, or visiting guests. Apartments need not be located in a residential building. A duplex unit should be classified as an Apartment (950) because it is not a separate, freestanding structure.

Limitations: Does not include single, freestanding structures (see 970) or any residential units that do not contain private cooking facilities (see 910, 920).

955 Apartment Service

Definition: A room or area that directly serves an apartment or group of apartments as an extension of the activities in that facility.

Description: Includes laundry rooms, mail rooms, linen closets, maintenance, housekeeping or security rooms, trunk storage rooms, telephone rooms, and weight or exercise rooms that serve apartment facilities. Apartment service facilities may be located in a separate building that serves an apartment complex. Service rooms (laundry, storage, etc.) that are internal to an apartment unit are included in the Apartment (950) space.

Limitations: Does not include service rooms (laundry, mail, trunk, etc.) that directly serve residential facilities which have no internal cooking facilities (see 910, 920, 935). This category also excludes service rooms within a separate, freestanding residential unit (see 970).

970 House

Definition: A complete living unit, with private cooking facilities, that is a separate structure. Should include fraternities and sorority houses only if owned or controlled by the institution (See Question 7 in Chapter 6).

Description: This is the basic module or group of rooms designed as a complete housekeeping unit (i.e., it contains bedroom(s), living room(s), kitchen, and toilet facilities). It is not intended that individual rooms be specifically identified within the structure, but only that the total interior area be accounted for. Includes houses provided for faculty, staff, or students. Should include fraternities and sorority houses only if owned by the institution (see Question 7 in Chapter 6).

Limitations: Houses and other residential properties that are owned or controlled by an institution as commercial investments, and that do not serve the institution's primary missions, are often excluded from the formally coded facilities inventory. Does not include complete living units that are part of a larger structure (see 950). Houses used as office areas should be classified with the Office Facilities (300 series) codes.

000 - Unclassified

General

Unclassified facilities include those assignable areas that are inactive or unassigned; in the process of being altered, renovated, or converted; or in an unfinished state.

050 Inactive Area

Definition: Rooms available for assignment to an organizational unit or activity but unassigned at the time of the inventory.

Limitations: Rooms being modified or not completed at the time of the inventory are classified as Alteration or Conversion Area (060) or Unfinished Area (070).

060 Alteration Or Conversion Area

Definition: Rooms temporarily out of use because they are being altered, remodeled, or rehabilitated at the time of the inventory.

Limitations: Rooms inactive or not completed at the time of the inventory are classified as Inactive Area (050) and Unfinished Area (070), respectively.

070 Unfinished Area

Definition: All potentially assignable areas in new buildings, shell space, or additions to existing buildings not completely finished at the time of the inventory.

Limitations: Intended only for the unfinished part or shell area of a building or addition; the parts that are in use should be appropriately classified.

Nonassignable Area

The following categories are included to complete the list of room use categories for institutions that choose to include nonassignable space in the facilities room inventory. Institutions may wish to include these areas and apply a different coding convention (e.g., numeric codes). Definitions of these categories of nonassignable space are provided in Chapter 4. As with all other room use classifications, institutions also may wish to track nonassignable areas with special physical characteristics, functions or equipment (e.g., elevators, various types of public rest rooms, handicapped equipped rooms, janitorial sink closets, various circulation areas and mechanical rooms, etc.) through the development and application of additional codes.

WWW **Circulation Area**

XXX **Building Service Area**

YYY **Mechanical Area**

Structural Area

The remaining area within the gross square footage of a building is structural or "construction" area, which cannot be occupied or put to use. (See Chapter 4 definitions of building areas.) Institutions may wish to include this area using a ZZZ code or some other appropriate designation for space which is neither assignable nor nonassignable.

ZZZ **Structural Area**

CHAPTER 6

QUESTIONS AND ANSWERS

Many questions arise in applying the definitions and coding structures contained in this manual to the particular circumstances and needs of individual institutions. The following are examples of common questions and dilemmas, with answers based on common practices in applying this manual.

1. Question: In the many years between publication of the *Facilities Inventory and Classification Manual*, 1973, and this revision, we have developed a number of additional room codes for use on our campus. Do we have to change or eliminate these codes?

   Answer: Campus codes need not be changed or eliminated. As noted throughout this revised manual, campuses may choose to develop and use their own special room use codes as long as these codes can be crosswalked to the codes in the manual.

2. Question: How does the coding structure account for such spaces as offices in auxiliary enterprise or hospital facilities? How are office assignments among academic departments differentiated?

   Answer: All offices are coded 310-Office, although institutions are free to expand this code to include faculty office, administrative office, clerical office, etc. The room use categories have been kept free from activity connotations. The use of the function code structure allows offices used by auxiliary enterprises to be differentiated from offices assigned to instruction. An office with the function code of general academic instruction would be further classified by academic discipline.

3. Question: Classrooms may be scheduled by a central campus office such as the registrar or may be assigned to a specific department which then schedules the classes. How does the coding scheme allow me to differentiate among these rooms in order to compare the utilization of classrooms scheduled by the registrar with the utilization of classrooms scheduled by specific departments?

   Answer: Two options are available:

   A. Under this manual's classification system, all classrooms are coded 110. By using components of the matrix, institutions will be able to differentiate among classrooms assigned by a registrar and those

assigned by a specific college or department. The function code for a classroom may vary depending, for example, on whether the space is used for general academic instruction (subfunction code 11) or vocational/technical instruction (subfunction code 12). The organizational assignment for a room scheduled by a central campus office might be "Registrar." The assignment for a room scheduled by a specific department or college would be that department or college.

B. Instead, institutions may wish to develop a sub-classification (e.g., 120-departmental classroom) with code 110 used for general classrooms.

4. Question: How should facilities such as uncovered parking lots, tennis courts, play fields, uncovered swimming pools and tracks be classified?

Answer: This manual deals only with buildings and the rooms contained therein. However, as noted in the introduction, institutions are encouraged to inventory all plant assets, through their own codification scheme.

5. Question: How should laboratories used for "departmental research" be coded?

Answer: If the primary use of the space is as a research/nonclass laboratory, the room use code is 250. According to the conventions and definitions in NACUBO's *Management Reporting and Accounting for College*, departmental research and public service that are not separately budgeted should be included as instruction. The function code in this case should be instruction. Research/Nonclass Laboratories (250) can have a function code of either 1.0 (instruction) or 2.0 (research) depending upon whether the laboratory is used for departmental (1.0) or separately budgeted (2.0) research.

6. Question: How are "departmental libraries" coded?

Answer: Most of the spaces in a departmental library will probably have room use codes in the Study Facilities (400) series. These libraries, if they contain catalogued materials, have a subfunction code of libraries-41. The organizational assignment will differentiate a departmental library from a centrally operated, staffed and controlled library. If a departmental library does not have a catalogued or otherwise classified collection, the function code for the spaces it contains is instruction.

7. Question: How are fraternity and sorority houses classified?

   Answer: Fraternity houses and rooms that are part of university facilities and are not separately organized and controlled are classified as student auxiliary enterprises, with the appropriate organizational unit assignment and room use code. However, if the fraternities or sororities are not owned or controlled by the university, they should not be included in the inventory.

8. Question: How are heating plants coded?

   Answer: Most of the space in a heating plant is nonassignable. However, where there are assignable areas, they should be coded in the appropriate room use category (i.e., 310-Office, or 350-Conference Room). All such rooms that are part of heating plant operations should be given a subfunction code of 74—operation and maintenance of plant—utilities.

9. Question: How should receiving areas be classified?

   Answer: Receiving areas, such as loading docks, should be treated as circulation space. A receiving area which is also used for central storage should be regarded as assignable area and coded as Central Storage (730). A central or campus-wide shipping and receiving area would be coded Central Service (750).

10. Question: How is spectator seating in outdoor stadia coded? How is the space underneath the seats classified?

    Answer: Outdoor stadia are not, by definition, buildings. Therefore, permanent seating in outdoor stadia is not assignable area. However, the space under the seats can meet the definition of a building. The rooms, for example, could be coded as Athletic Or Physical Education Service (525) or Offices (310), depending upon their use.

11. Question: How should chapels be coded?

    Answer: A chapel meets the definition of a devotional facility and should be coded as Assembly (610) along with other devotional facilities. The usual subfunction code is 52 (social and cultural development) if under university control. A chapel in a hospital would have a function code of 11.0 (hospitals). If the chapel is not under university control, it should not be inventoried.

12. Question: How should day care centers be coded?

Answer: Day care centers may be coded as Demonstration (550) or Day Care (640). Day care rooms used to *practice*, within an instructional program, the principles of child care or development, or teaching are classified as Demonstration (550). Day Care (640) serves as a central service center for faculty, staff and students. Demonstration day care centers have a function classification of instruction (1.0), while those facilities coded 640 could have a function classification of either institutional support or auxiliary enterprise depending upon how the activity is organized.

13. Question: A room is used for many different functions. How do I classify it? A room was designed as a laboratory and is now used as an office. Is it classified as a laboratory or an office?

Answer: Unless space is being prorated, the room should be classified according to primary or predominant room use (normally based on amount of time) when the inventory is made. Room *intent*, *design*, *type*, name or contained equipment does not, therefore, affect the coding classification unless it is compatible with actual use.

14. Question: We have a glass blowing shop on campus which serves many of our scientific departments. How should this space be classified?

Answer: Special purpose shops (e.g., glass blowing, machining) supporting multiple rooms for scientific instruction and research should be coded as Shop (720).

15. Question: How are inner office hallways coded? Are they assignable or nonassignable space?

Answer: If they are private circulation areas (restricted access), they are generally classified as Office Service (315). Private circulation areas in open laboratory facilities are classified as Open Laboratory Service (225).

16. Question: What is the difference between a lobby and a lounge?

Answer: A lounge differs from a lobby (nonassignable circulation area) in placement, use, and intent. A lobby is generally located at a major entrance with openings to hallways on more than one side; and although it may have seating furniture, it is designed more for walking through (or having standing conversations) than for sitting and relaxing.

17. Questions: We have a large room used for the registration process and have had trouble trying to decide how to classify it?

Answer: The investigator needs to determine the primary use of the space. If the space is *only* used for registration, it should be coded Meeting Room (680) since it is used by the institution for nonclass meetings.

18. Question: We have water wells which are equipped with motorized pumps and which are covered with a shed for protection against the elements. Should these structures be included in the facilities inventory?

Answer: Separate, minor structures, such as wells, should not be included in the facilities inventory unless they meet all four criteria for buildings. Although the wells are roofed and serviced by a utility exclusive of lighting, we cannot tell if the wells are attached to a permanent foundation and if they are a source of significant maintenance and repair activities. Assuming that these two latter criteria have not been met, the wells should not be included in the facilities inventory. We would recommend that the wells be reported in the institution's plant asset or equipment inventory system.

19. Question: How should I report an area which is covered, but not enclosed on all four sides, and is used for central campus storage? Is this space assignable?

Answer: Yes, this covered, unenclosed area would be considered assignable space and would be classified as 730 Central Storage.

20. Question: There is a permanent eating area, equipped with tables and chairs, which is located in a covered, unenclosed area of our Student Union Building. Is this space assignable even though the facility only has one wall? Should I count this space as part of the gross area?

Answer: By creating a *phantom* wall, you would classify this assignable area as 630-Food Facility. This area should also be reported as part of the building's gross area.

21. Question: At our campus, we have underground pedestrian tunnels and above-ground pedestrian bridges which connect one building to another. How should I account for these areas? Are they assignable? If so, which room use code would I use? How do I report the amount of space as part of the gross area? Does the length of the tunnel or bridge get reported to one building or should I split the area equally between the two connected buildings?

Answer: Underground pedestrian tunnels and above-ground pedestrian bridges which connect two separate buildings are considered circulation area and therefore are not assignable areas. Institutions should include one-half of the tunnel's or bridge's gross area to each of the two buildings. Alternatively, enclosed connectors that are clearly identified with one building by virtue of style, date of construction, etc., may be included in the gross area of that structure.

22. Question: On our campus, we have "buildings" that are really contiguous structures built at different times to meet new needs. For example, a library wing was added to a classroom structure, and later a structure housing laboratories. But they all share walls and are physically connected. Should these be inventoried as a single structure or several different buildings?

Answer: This determination should take into account the distinctiveness of the style and features of the original structure and the additions, whether they share common utilities and services (e.g., heating systems, entrance areas), time of construction, and other factors. Do they look and perform as one building or several? This is a local determination based on the relevant factors and the preferences of the institution.

APPENDIX 1

ACCESSIBILITY STANDARDS

Section 504 Program Accessibility Standards

The Department of Education's Section 504 regulation applies to preschool, elementary, secondary, postsecondary, vocational, and adult education programs and activities, as well as other programs and activities that receive or benefit form Federal financial assistance. In accordance with Subpart C of the Section 504 regulation, no qualified individual with handicaps shall be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity because a recipient's facilities are inaccessible to, or unusable by them.

The Section 504 regulation contains two standards to be used in determining whether a recipient's program and activities are accessible to individuals with disabilities. One standard deals with "'existing" facilities; the other deals with "new" construction.

The term "EXISTING FACILITY" refers to any facility in existence or in the process of construction before June 3, 1977, the effective date of the regulation. The term "NEW CONSTRUCTION" means groundbreaking which took place on or after the effective date of the regulation. FACILITY as defined in the Section 504 regulation includes all or any portion of buildings, structures, equipment, roads, walks, parking lots, laboratories, and other real or personal property or interest in such property.

The requirements for accessibility are distinctly different for facilities built or begun before June 3, 1977, the effective date of the regulation, and facilities whose construction commenced on or after June 3, 1977.

For facilities constructed before June 3, 1977, the regulation requires that the recipient's program or activity, WHEN VIEWED IN ITS ENTIRETY, is readily accessible to persons with handicaps. This standard does not require that every facility or part be accessible, as long as individuals with handicaps have access to the programs and services contained in those facilities. Thus, recipients need not make structural changes to facilities which existed before June 3, 1977, where other alternatives are EFFECTIVE in making programs and activities accessible.

Examples of alternative methods include redesign or relocation of equipment; reassignment of classes and services; provision or assignment of aids (e.g., use of "reach extenders" to access controls on elevators or light switches, assistance in retrieving library materials.)

Priority consideration, however, must be given to offering the programs or activities in the most integrated setting appropriate. In meeting the objective of program accessibility, an institution must take precaution not to isolate or concentrate individuals in settings away from

nonhandicapped participants. For example, it would be a violation to make only one facility or part of a facility accessible if this resulted in segregating students with disabilities.

It should be noted that if no effective alternatives can be provided to achieve program accessibility, a recipient is required to make necessary structural changes. These changes are to be made consistent with the requirements for "NEW CONSTRUCTION."

When the Section 504 regulation became effective on June 3, 1977, all new construction begun on that date, as well as alterations which could effect access to use of existing facilities, were required to be designed in conformance with the American National Standards Institute (ANSI) Standards A117.1-1961 (R 1971). However, on December 19, 1990, the Department of Education, along with many other Federal agencies, amended the Section 504 regulation to reference the Uniform Federal Accessibility Standards (commonly referred to as UFAS) in place of the accessibility guidelines issued by the ANSI 1971 document. The effective date for this change was JANUARY 18, 1991.

The major purpose of this change was to ensure greater uniformity among Federal enforcement standards. For example, some Federal funding agencies, like ours, referenced ANSI 1971 while others referenced ANSI 1980. Also, some facilities subject to new construction under Section 504 are also subject to the Architectural Barriers Act, which references UFAS.

Consequently, government-wide reference to UFAS should diminish the possibility that recipients of Federal financial assistance will face conflicting standards. Also, reference to UFAS by all Federal funding agencies is designed to reduce potential conflicts when a building is subject to the Section 504 regulation of more than one Federal agency.

Accessibility Standards Under the Americans with Disabilities Act

The American with Disabilities Act (ADA), which provides comprehensive civil rights protection to individuals with disabilities in the areas of employment, public accommodations, State and local government services, and telecommunications, was enacted on July 26, 1990. On July 26, 1991, the Department of Justice issued separate final regulations implementing subtitle A of Title II of the Americans with Disabilities Act (ADA), which prohibits discrimination on the basis of disability by public entities, and Title III of the ADA, which prohibits discrimination on the basis of disability by private entities in place of public accommodation. Although the Office of Civil Rights (OCR) does not have any enforcement authority under Title III of the ADA, OCR does have responsibility for enforcing the Title II regulation in elementary and secondary education systems and institutions, institutions of higher education and vocational education (other than schools of medicine, dentistry, nursing and other health-related schools), and libraries. The regulations implementing Title II and Title III became effective on January 26, 1992.

The Americans with Disability Act Accessibility Guidelines for Buildings and Facilities (ADAAG) is the applicable accessibility standard under the Title III regulation for new construction and alterations. The Department of Justice anticipates that the rule implementing subtitle A of Title II will be amended to adopt new accessibility standards. Until that time, public entities have a choice of following UFAS or ADAAG. However, public entities must follow the same standard throughout an entire building. They cannot follow ADAAG on one floor of a new building and then follow UFAS on the next floor. Public entities that choose to follow ADAAG are not entitled to the elevator exemption contained in Title III of the ADA for small buildings.

It is important to note that although the ADAAG is modeled on UFAS, the ADAAG established different requirements in some areas. For example, requirements differ concerning elevators, signage, telecommunication display devices or telecommunication devices for the deaf for individuals who cannot use voice telephones, and checkout aisles in areas used for business transactions with the public.

Also, it is possible that there will be some differences between UFAS and the future accessibility standards that will be adopted under the rule implementing subtitle A of Title II of the ADA.

It is anticipated that OCR will provide guidance shortly concerning the major differences between ADAAG and UFAS. We also anticipate that OCR will provide guidance regarding the differences between UFAS and the future accessibility standards that will be adopted under Title II.

APPENDIX 2

TAXONOMY OF FUNCTIONS

This Taxonomy is adapted from the *Financial Accounting and Reporting Manual for Higher Education* and the earlier *Management Reporting and Accounting for Colleges*, Second Edition (1988) by the National Association of College and University Business Officers (NACUBO). While the taxonomy was originally designed for financial reporting, it may be readily adapted to facilities reporting through limited modifications. For example, the category of Scholarships And Fellowships would not be used as a function in a facilities inventory. Categories for Independent Operations and Hospitals have been added to the taxonomy because they are necessary categories for facilities reporting. The following represents a brief synopsis of a possible adaptation of this taxonomy.

Definitions Of Functional Categories

1.0 Instruction. This category includes all activities that are part of an institution's instruction program. Credit and noncredit courses, for academic, vocational, and technical instruction, for remedial and tutorial instruction, and for regular, special, and extension sessions should be included.

1.1 General Academic Instruction: Includes formally organized and/or separate instructional activities that are: 1) carried out during the academic year, 2) associated with academic disciplines, and 3) offered for credit as part of a formal postsecondary education degree or certificate program.

1.2 Vocational/Technical Instruction: Formally organized and/or separate instructional activities that are 1) carried out during the academic year, 2) usually associated with academic disciplines, and 3) offered for credit as part of a formal postsecondary education degree or certificate.

1.3 Special Session Instruction: Includes formally organized and/or separately budgeted instructional activities (offered either for credit or not for credit) that are carried out during a summer session, interim session, or other period not common with the institution's regular term.

1.4 Community Education: Includes formally organized and/or separate instructional activities that do not generally result in credit toward any formal postsecondary degree or certificate.

1.5 Preparatory/Remedial Instruction: Includes formally organized and/or separate instructional activities that give students the basic knowledge and skills required by

the institution before they can undertake formal academic coursework leading to a postsecondary degree or certificate.

2.0 Research. This category should include all activities specifically organized to produce research outcomes, whether commissioned by an agency external to the institution or separately by an organizational unit within the institution.

2.1 Institutes and Research Centers

2.2 Individual and Project Research

3.0 Public Service. This category should include activities that are established primarily to provide noninstructional services beneficial to individuals and groups external to the institution.

3.1 Community Services

3.2 Cooperative Extension Services

3.3 Public Broadcasting Services

4.0 Academic Support. This category should include support services for the institution's primary missions—instruction, research, and public service.

4.1 Libraries

4.2 Museums and Galleries

4.3 Educational Media Services

4.4 Academic Computing Services

4.5 Ancillary Support

4.6 Academic Administration

4.7 Academic Personnel Development

4.8 Course and Curriculum Development

5.0 Student Services. This category should include offices of admissions and registrar and those activities whose primary purpose is to contribute to the student's emotional and physical well-being and to his or her intellectual, cultural, and social development outside the context of the formal instruction program.

5.1 Student Services Administration

5.2 Social and Cultural Development

5.3 Counseling and Career Guidance

5.4 Financial Aid Administration

5.5 Student Admissions

5.6 Student Records

5.7 Student Health Services

6.0 Institutional Support. This category should include 1) central executive-level activities concerned with management and long-range planning of the entire institution, such as the governing board, planning and programming, and legal services; 2) fiscal operations, including the investment office; 3) administrative data processing; 4) space management; 5) employee personnel and records; 6) logistical activities that provide procurement, storerooms, safety, security, printing, and transportation services to the institution; 7) support services to faculty and staff that are not operated as auxiliary enterprises; and 8) activities concerned with community and alumni relations, including development and fund raising.

6.1 Executive Management

6.2 Fiscal Operations

6.3 General Administrative and Logistical Services

6.4 Administrative Computing Services

6.5 Public Relations/Development

7.0 Operation And Maintenance Of Plant. This category should include the operation and maintenance of physical plants for all institutional activities, including auxiliary enterprises, and independent operations

7.1 Physical Plant Administration

7.2 Building Maintenance

7.3 Custodial Services

7.4 Utilities

7.5 Landscape and Grounds

7.6 Major Repairs and Renovations

8.0 This category includes Scholarships and Fellowships but is not used in facilities.

9.0 Auxiliary Enterprises. An auxiliary enterprise is an entity that exists to furnish goods or services to students, faculty, or staff, and that charges a fee directly related to, although not necessarily equal to, the cost of the goods or services.

9.1 Auxiliary Enterprises—Student

9.2 Auxiliary Enterprises—Faculty/Staff

9.3 Intercollegiate Athletics

10.0 Independent Operations. This category includes those operations that are independent of, or unrelated to, but which may enhance the primary missions of the institution.

11.0 Hospitals. This category includes patient care operations of the hospital, including nursing and other professional services, general services, administrative services, fiscal services, and physical plant operations and institutional support.

APPENDIX 3

CODING FOR ACADEMIC DISCIPLINES

This manual recommends that assignable space be coded according to the academic units or discipline structure appropriate to the institution or institutions. The National Center for Education Statistics (NCES) replaced the HEGIS Taxonomy of Disciplines with the Classification of Instructional Programs (CIP) during the 1980s. The CIP structure may not be as appropriate for facilities coding as a discipline-based structure for many institutional uses. For external reporting of facilities data, however, this manual recommends that all organizational unit or discipline codes be "crosswalked" to the CIP program structure at the two-digit level or higher.

A listing of the two-digit level program codes implemented by NCES in 1992 is provided below. For definitions and more detailed descriptions and codes, consult the *1992 Classification of Instructional Programs*, published by the U.S. Department of Education, National Center for Education Statistics.

Academic And Vocational Programs

01. Agricultural Business and Production
02. Agricultural Sciences (excludes 03 and 31)
03. Conservation and Renewable Natural Resources
04. Architecture and Environmental Design
05. Area and Ethnic Studies
08. Marketing Operations
09. Communications
10. Communications Technologies
11. Computer and Information Sciences
12. Personal and Miscellaneous Services
13. Education (excludes 21 and 41)
14. Engineering
15. Engineering-Related Technologies (excludes 41)
16. Foreign Languages and Literatures
19. Home Economics
20. Vocational Home Economics
21. Technology Education/Industrial Arts
22. Law
23. English Language and Literature/Letters
24. Liberal Arts and Sciences, General Studies and Humanities (excludes 05, 09, 16, 23, 38, 39, 42 and 45)
25. Library Science
26. Biological Sciences/Life Sciences (excludes 51)
27. Mathematics

29. Military Technologies
30. Multi/Interdisciplinary Studies
31. Parks and Recreation
38. Philosophy and Religion
39. Theology
40. Physical Sciences
41. Science Technologies (excludes 15)
42. Psychology
43. Protective Services
44. Public Administration and Services
45. Social Sciences (excludes 42)
46. Construction Trades
47. Mechanics and Repairers
48. Precision Production
49. Transportation and Material Moving
50. Visual and Performing Arts
51. Health Sciences and Allied Health Services
52. Business Management and Administrative Services (excludes 08)

Reserve Officers Training Corps (ROTC)

28. Reserve Officers Training Corps (ROTC)

Personal Improvement And Leisure Programs

32. Basic Skills
33. Citizenship Activities
34. Health-related Knowledge and Skills
35. Interpersonal and Social Skills
36. Leisure and Recreational Activities
37. Personal Awareness and Self-Improvement

APPENDIX 4

ARCHITECTURAL FEATURES RELATED TO ROOM USE

The design of a room in terms of architectural features often dictates the assignment of a room to specific uses or limits flexibility in reassigning some rooms to other uses or academic disciplines. The assignment of codes for architectural features can assist an institution in managing its space resources.

A. *Definition:* The architectural features of a room, including structural design and utility services, that are relevant to the use of the room.

B. *Basis for Classification:* The information needed to code rooms according to architectural features can best be obtained by visual inspection of each room, but may also be obtained from as-built drawings. These room characteristics will change only when the room is remodeled. This coding can best be done by those familiar with the physical characteristics of campus buildings.

Each room may be assigned one code based on its structural characteristics and up to six codes based on the presence or absence of special utility services.

C. *Structural Features Coding:* The following categories may be used to indicate structural features:

1. Flat floor, low bay, no special characteristics.
2. Flat floor, low bay, one or more special characteristics.
3. Flat floor, high bay, no special characteristics.
4. Flat floor, high bay, one or more special characteristics.
5. Sloped or stepped floor.
6. Other structural configurations not classifiable into one of the above.

Low bay ceiling heights (measured floor to underside of floor above) are 13 feet or less. High bay ceiling heights are over 13 feet.

Special characteristics of the room may include such architectural features as wall or door arrangements to eliminate light, projection booths or rear-view projection, sound deadening, electromagnetic screening, X-ray blocking, vibration damping, special insulation in cold or hot rooms, and heavy security doors and walls in vaults.

D. *Utility Services Coding:* The following categories may be used to indicate the availability of identified utility services:

(C) Communication. Special cabling for telecommunications, data distribution, video sources, or media projection.

(E) Electrical Service. Special electrical services such as 220v, 440v, or filtered electrical supply.

(S) Special Plumbing Service. Special plumbing services such as acid drains, glassed pipes, distilled water provision.

(T) Temperature Control Service. Special temperature and humidity control services, typically for cold or hot rooms.

(V) Ventilating Service. Special ventilating services such as fume hoods, clean rooms, or special air circulation systems for animal rooms.

(W) Water Service. Access to water drainage for drinking, washing, or sanitary functions.

E. *Examples of Room Coding for Architectural Features are Indicated in Figure 3.*

FIGURE 2: Room Coding for Architectural Features

		Utilities					
	Struct.	C	E	S	T	V	W
A room in a low bay section of a building (used for an office) with no architectural barriers.	1						
A room in a low bay section of a building (used for a classroom) with no architectural barriers but wired for video projection.	1	X					
A room in a high bay section of a building with 220v electrical service (could be used for a shop where large objects are handled, even if now being used as a classroom).	3		X				
A room in a low bay section that has water access and power (could be used for a kitchenette).	1		X				X
A room in a high bay section of a building that has 220v electrical service, acid drains, and fume hoods.	3		X	X		X	
A room in a high bay section with a stepped floor that has 220v electrical service.	4		X				
A room in a low bay section with special insulation and with 220v electrical service and special temperature controls.	2		X		X		

APPENDIX 5

ROOM SUITABILITY

The coding of room suitability is intended to reflect a judgment about how well the design of a room supports the function of the room and the organizational unit to which the room is assigned. This evaluation of *room suitability* for its assigned use focuses on a different dimension than the coding of *building condition*, which generally assesses the useful life of a building through the evaluation of structural and building systems.

It is entirely possible that the evaluation of room suitability may reflect an evaluation that seems to conflict with the evaluation of building condition. For example, a room such as a geography class laboratory (see 210) could be evaluated as satisfactorily suited for its existing use even though the building in which the room is located could be rated as requiring major remodeling due to the age and condition of utility or structural systems.

A. *Definition:* The suitability or functionality of the room for its assigned use at the time of the inventory or audit.

B. *Basis for Classification:* The evaluation of a room for functional suitability should be based on the judgment of a departmental representative (rather than the individual user assigned to the room) and the institution's facility planning or physical plant personnel. Only permanent architectural features and fixed equipment should be considered in rating the room's suitability; the configuration, age, condition or amount of movable furniture and equipment should not affect the rating. The rating of room suitability can change significantly from one inventory or audit date to the next if, in the intervening period, the room has been reassigned to a different function or organizational unit, even though no physical alterations have been undertaken.

C. *Coding:* The following categories may be used to designate room suitability:

i. Highly functional: Optimal for a room of this type; recently constructed or renovated; fully supports present use.

ii. Satisfactory: Suitable for continued use with normal maintenance; provides opportunity for adequate program delivery.

iii. Limited renovation: Requires limited renovation to support existing assigned use on a continued basis. The cost of renovation to support program delivery would not exceed 25% of the replacement cost of the room.

iv. Major renovation: Requires major renovation to support the existing assigned use on a continued basis; significantly inhibits adequate program

delivery. The cost of the renovation would be between 25% and 50% of the replacement cost of the room.

v. Unsatisfactory: Unsatisfactory for the existing assigned use, and cannot be renovated to serve the program adequately for less than 50% of the replacement cost of the room.

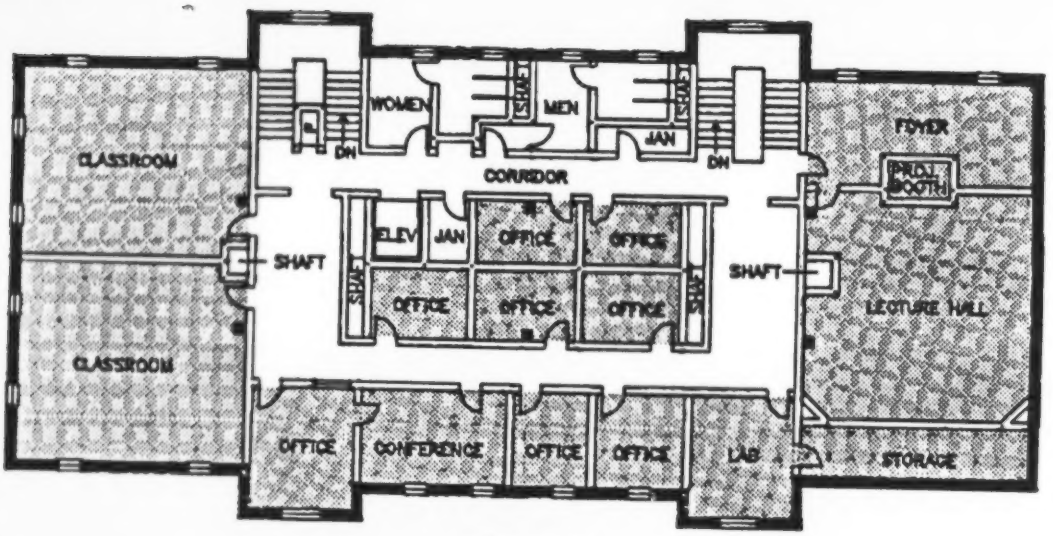
vi. Inappropriate: Room can support the current use, but the use is not appropriate for a room of this type.

APPENDIX 6

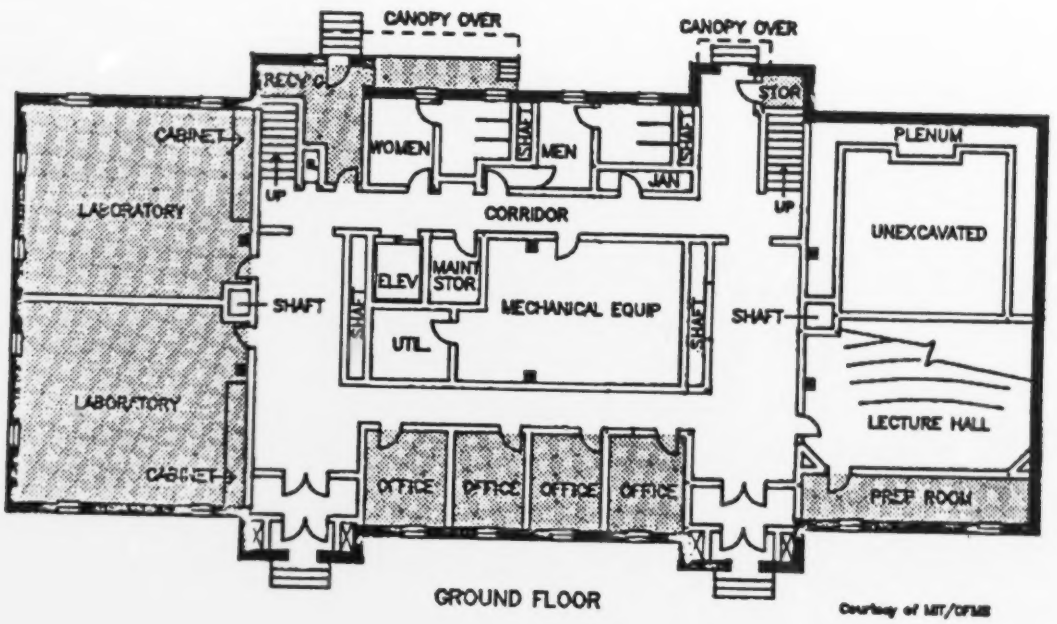
ARCHITECTURAL DRAWINGS FOR BUILDING AREAS

The architectural drawings in this appendix provide a graphic representation for some of the building area definitions found in Chapter 4. First floor and ground floor drawings are included for Gross, Assignable, Building Service, Circulation, Mechanical, and Structural Areas. These drawings may or may not be representative of building facilities at a particular institution, but they will serve to illustrate conceptually these building areas.

DRAWING 1: Gross Area



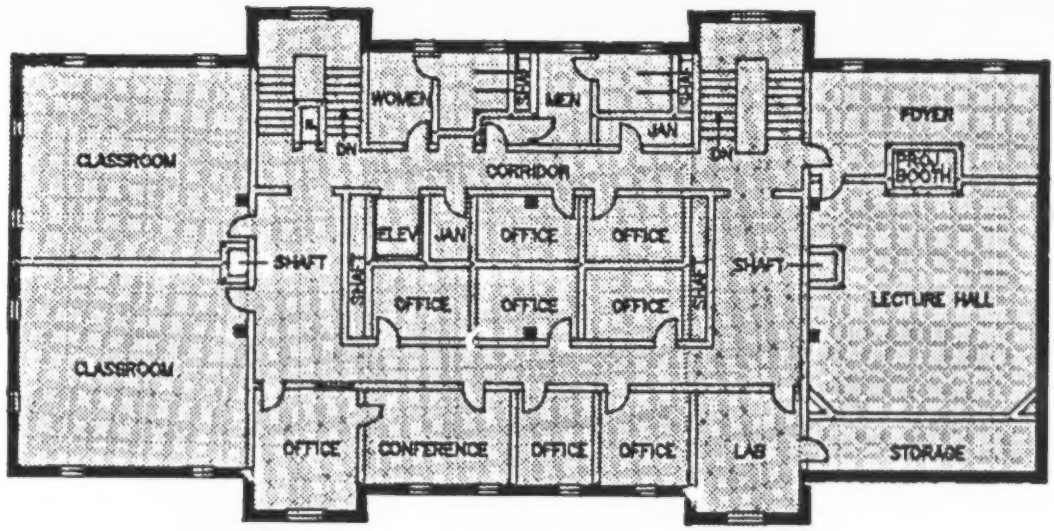
FIRST FLOOR



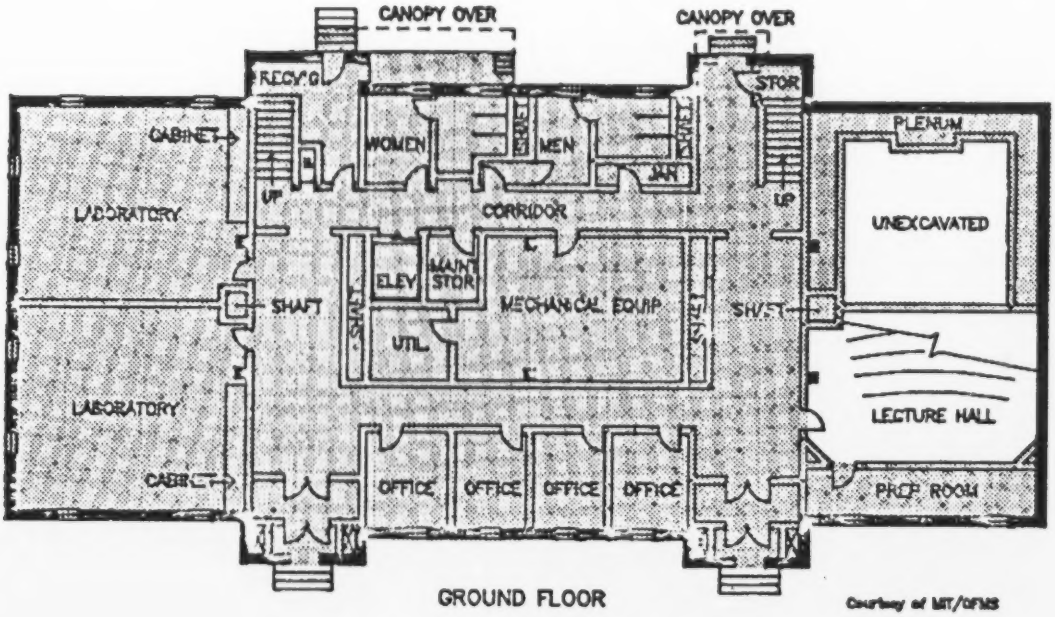
GROUND FLOOR

Courtesy of MIT/CFHE

DRAWING 2: Assignable Area



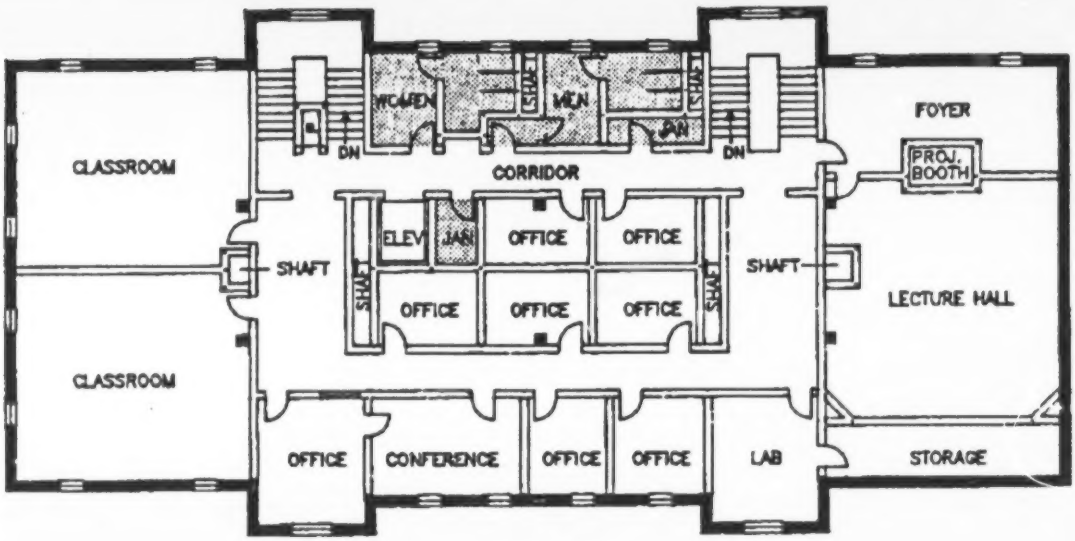
FIRST FLOOR



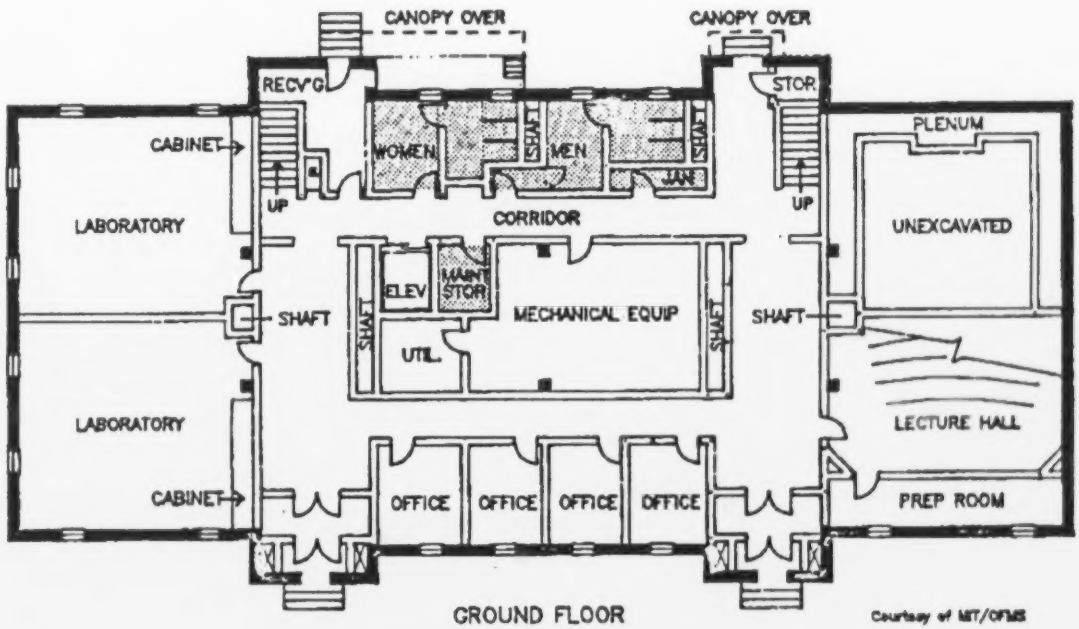
GROUND FLOOR

Courtesy of MIT/DFMS

DRAWING 3: Building Service Area



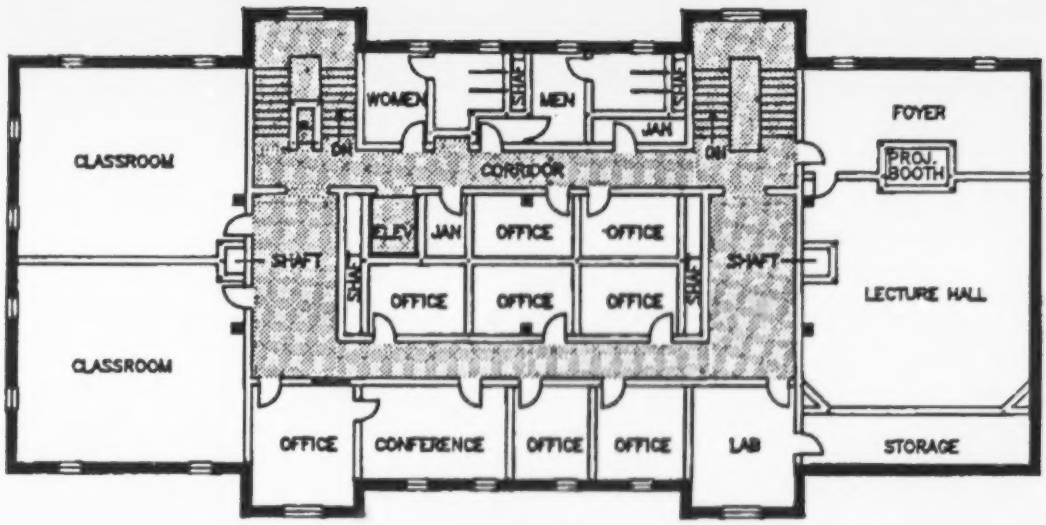
FIRST FLOOR



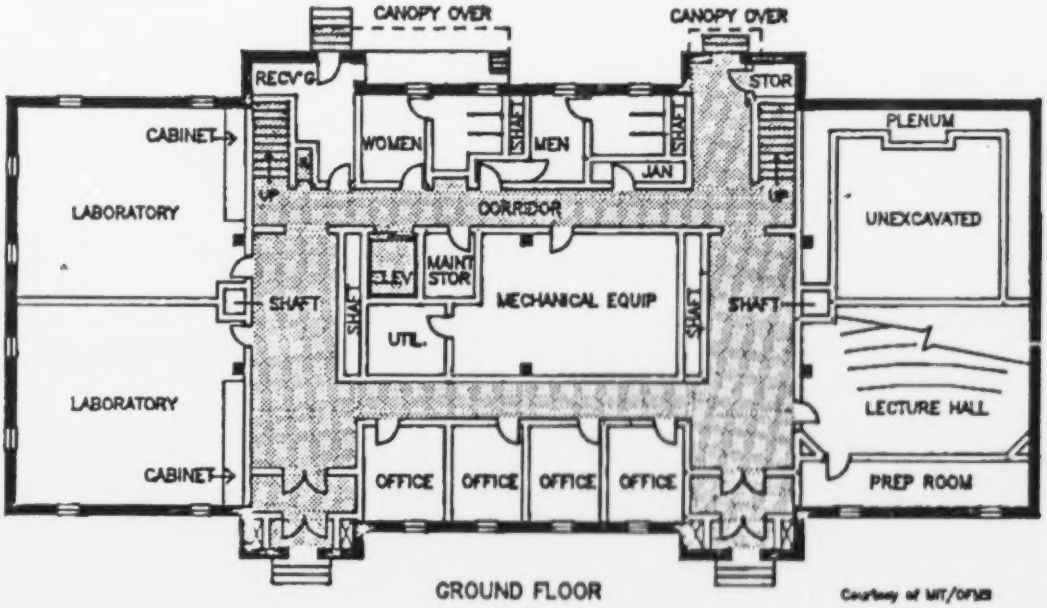
GROUND FLOOR

Courtesy of MIT/OPMS

DRAWING 4: Circulation Area



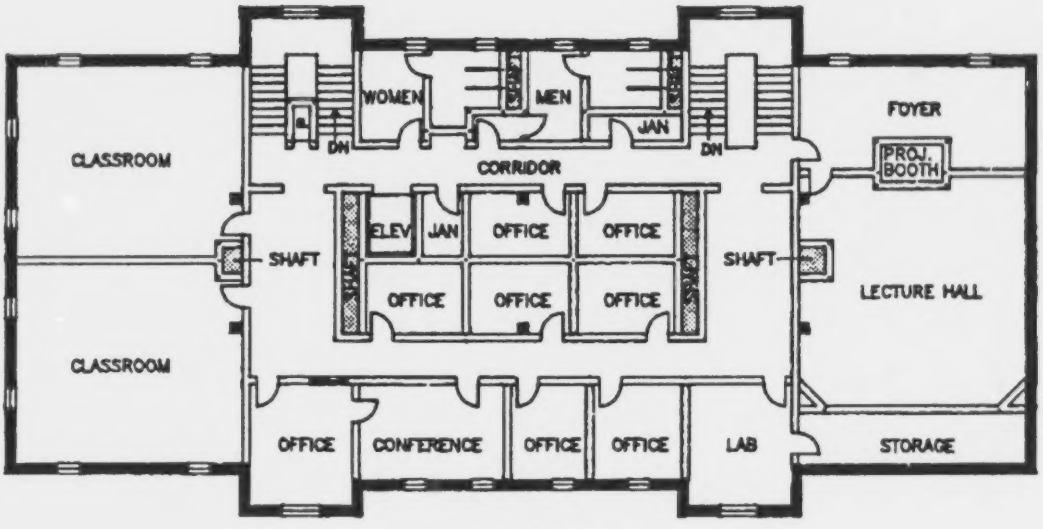
FIRST FLOOR



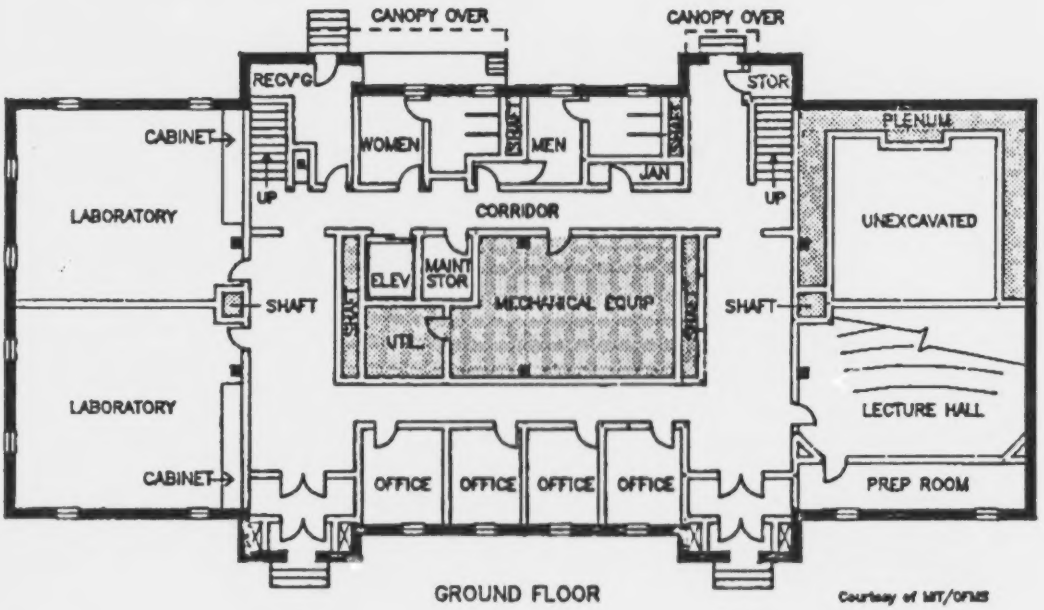
GROUND FLOOR

Courtesy of MIT/DPWS

DRAWING 5: Mechanical Area



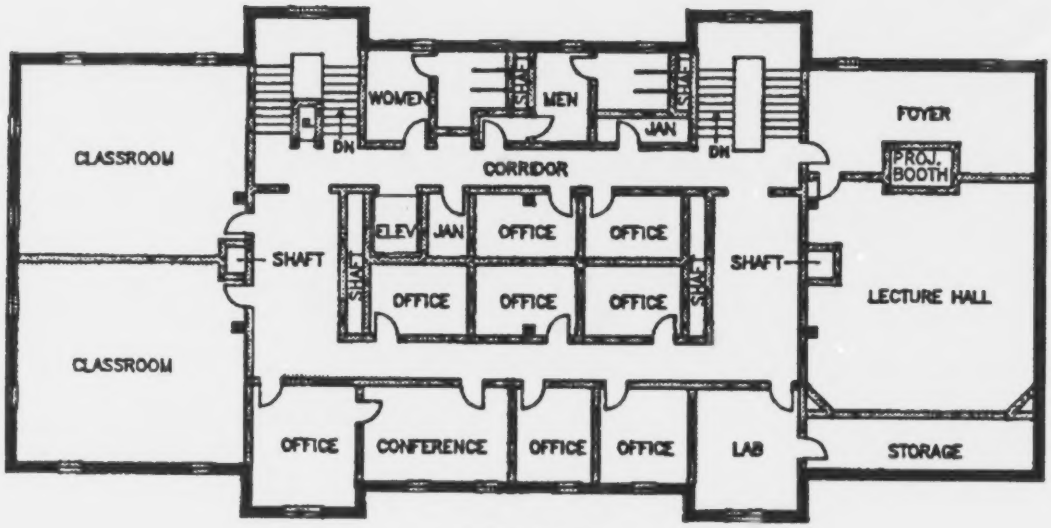
FIRST FLOOR



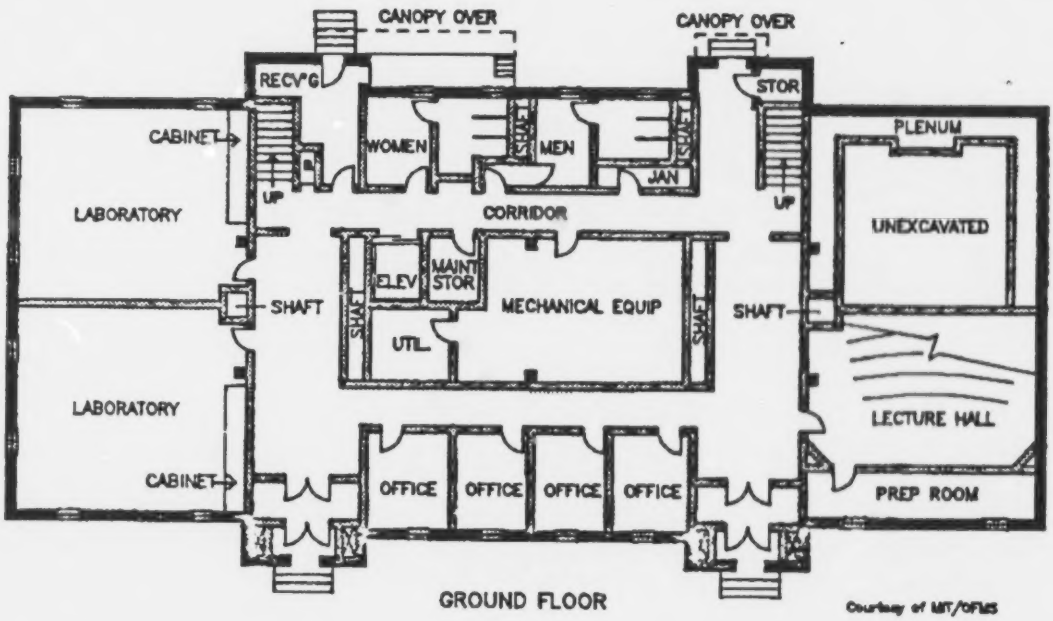
GROUND FLOOR

Courtesy of MIT/OPMS

DRAWING 6: Structural Area



FIRST FLOOR



GROUND FLOOR

Courtesy of MIT/OPMS

APPENDIX 7

USING FACILITIES INVENTORY DATA FOR INTER-INSTITUTIONAL DATA EXCHANGE AND REPORTING

In addition to institutional use, the definitions and framework provided in this manual are adaptable to inter-institutional data exchange and other types of external reporting. The National Center for Education Statistics, the State Higher Education Executive Officers and other participating organizations wish to encourage the adoption of this manual by those organizations and states already engaged in collecting and reporting multi-institutional facilities data, as well as to encourage additional organizations and states to undertake this activity.

To help stimulate these activities and thereby enhance the availability and comparability of such summary information, this appendix provides a sample instrument or format for Data Exchange on Postsecondary Physical Facilities. The sample instrument is intended to provide a basic framework for external sharing or reporting of summary data drawn from more detailed building inventory and room inventory data sets maintained by individual institutions and by system- or state-level offices. The sample format includes only the most basic data in areas of general concern, such as total building area, ownership status, year of construction and current condition, with assignable area allocated across the standard Room Use Categories. In addition, it suggests a format for cross-referencing Room Use Categories with the standard Functional Categories. Such cross-referencing of the two coding structures is useful for identifying the proportion of Classroom, Laboratory or Office space used for instruction, organized research, public service or other functions.

Sponsoring organizations may wish to expand this sample data exchange instrument to add additional data elements or greater detail with respect to particular categories or codes (e.g., subdividing Academic Support functions to identify Libraries). Data exchange programs may also wish to provide an instrument in computer diskette format, containing instructions, definitions and built-in column summation and data editing routines. Computer-based formats have the potential to improve substantially data reporting by institutions as well as data entry and analysis by the sponsoring organization.

In addition to data that focus exclusively on physical facilities, many institutions, data exchange organizations and other agencies may find it useful to relate facilities data to the number of students, faculty members, academic programs or other variables. For example, the last comprehensive national survey of higher education facilities, undertaken by NCES in 1974, included an analysis of facility space (average assignable square feet) per full-time-equivalent student, across the standard use categories (classroom, laboratory, etc.) and in relation to the

type and size of institution.[12] Multi-institution system or state-level facilities reports typically include a variety of such comparative indicators. The annual North Carolina *Facilities Inventory and Utilization Study*, for example, contains capacity/enrollment ratios, facility utilization rates, and accessibility indicators.[13]

As suggested in Chapter 3, several types of ratios may be useful for both intra-institutional and inter-institutional comparisons. These include:

- assignable square feet per student, analyzed by the type of space, program area, student status or other characteristics;
- residential facility space per student housed on campus;
- library space per student and program type;
- office space per faculty member and non-faculty staff by area or function; and
- research or other non-class laboratory space per faculty member in relation to discipline and other factors.

In designing and using such ratios, care should be taken to make sure that comparisons across programs or institutions accurately reflect different academic missions, clientele, urban/rural locations, institutional types, and other factors. For example, space per student or faculty member may be directly affected when facilities can be used for extended day and evening services. It is also important to have consistent and sufficient detailed definitions for different categories of students. Similarly, relating facility space to faculty may require additional detail on faculty responsibilities, discipline or program type, and other factors.

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[12] National Center for Education Statistics, Higher Education General Information Survey (HEGIS-9), *Inventory of Physical Facilities in Institutions of Higher Education, Fall 1974*, U.S. Department of Health, Education and Welfare, Washington, D.C.

[13] See for example, State Commission on Higher Education Facilities, *Facilities inventory and Utilization Study, Fall of 1990* (Chapel Hill: The University of North Carolina, General Administration, 1991).

Data Exchange on Postsecondary Physical Facilities

Part A. Organizational and Institution Identification

1. Data exchange sponsoring organization

1a.	Organization:
1b.	Address:
1c.	Contact Person:
1d.	Telephone:

2. Responding institution/organization

2a.	Name:
2b.	Address:
2c.	Institution Identification: IPEDS UNIT ID _____ FICE Code _____ Other _____
2d.	Name and Title of Respondent:
2e.	Telephone:

3. The institution/organization covered by this report is *(choose only one)*:
NOTE: See definitions in FICM Glossary.

3a.	☐	A single-campus institution *(If yes, go directly to Part B.)*
3b.	☐	One of the administratively equal campuses of a multi-campus system *(If yes, go directly to Part B.)*
3c.	☐	A branch campus of a parent institution *(If yes, indicate the name of the parent institution in Question 4 below.)*
3d.	☐	A main campus ("parent" institution) with one or more branch campuses and/or other campuses *(If yes, please answer Question 5 below.)*
3e.	☐	Other. Specify:

4. If the institution covered by this report is a branch campus in an "institutional system," write in the name of the "parent" institution or system below:

5. Parent institutions (as checked in item 3) should list the names of all their branch campuses below. Use the first column to show whether data for any of these units are included with the data for the "parent" in this report.

Are Data for This Unit Included in This Report?	Name of Branch Campus and/or Other Campus	Address (City, State and Zip Code)
5a. ☐ Yes ☐ No		
5b. ☐ Yes ☐ No		
5c. ☐ Yes ☐ No		
5d. ☐ Yes ☐ No		
5e. (Extend as necessary)		

Part B — Building Inventory

INSTRUCTIONS: Totals for Assignable Area and Gross Area provided in Line 1 should match totals provided on lines B.7, B.13(f), C.68(a), and D.12(a). Definitions and procedures for measurements are provided in the *Postsecondary Education Facilities Inventory and Classification Manual 1992*, (FICM92). The categories for Ownership Status follow definitions provided in FICM92, Chapter 4, except that Line 6 requests a combined subtotal of categories v through viii. NOTE: For institutions that do not collect detailed data on Ownership Status or that use other legal definitions, please use Line 2 to report all facilities owned by the institution, Line 5 to report leased facilities, and Line 6 to report all other categories (shared, third-party ownership, joint-venture, etc.).

Line No.	Building Data Category	Number of Buildings Column (a)	Assignable Area (in square feet) Column (b)	Gross Area (in square feet) Column (c)
1	Total Campus Space.			
	Ownership Status			
2	Owned in fee simple.			
3	Title vested in the institution and being paid for on an amortization schedule (regardless of whether the building is shared with another institution or organization).			
4	Title vested in a holding company or building corporation to which payments are being made by the institution; title will ultimately pass to the institution (includes lease-purchase arrangements).			
5	Not owned by the institution, but leased or rented to the institution at a typical local rate.			
6	Other, not owned by the institution, including facilities shared with other entities.			
7	***Total (Sum of Lines 2-6)***			

Part B. Building Inventory, continued

Gross Square Feet by Condition and Year of Construction

		Building Condition in Gross Square Feet						
Line No.	Year of Construction	Satisfactory Column (a)	Remodeling A Column (b)	Remodeling B Column (c)	Remodeling C Column (d)	Remodeling (Other) Column (e)	Demolition/ Termination Column (f)	Line Total Column (g)
6	Pre-1930							
7	1931-1950							
8	1951-1960							
9	1961-1970							
10	1971-1980							
11	1981-1990							
12	1991 to present							
13	*Total (Sum of Lines 6-12)*							

Definitions adapted from Chapter 4 of the *Postsecondary Education Facilities Inventory and Classification Manual 1992*. NOTE: If data for Building Condition by Year of Construction cannot be reported, at a minimum please complete Column (f) and Line 13 totals to the extent possible. If Remodeling A, B, and C cannot be distinguished or if remodeling estimates are not recent or are otherwise questionable, please report total remodeling in Column (e), Remodeling (Other).

Satisfactory
Suitable for continued use with normal maintenance.

Remodeling A
Requires restoration to present acceptable standards without major room use changes, alterations, or modernizations (approximate cost not greater than 25% of the estimated replacement cost of the building).

Remodeling B
Requires major updating or modernization of the building (approximate cost is greater than 25%, but not greater than 50% of the estimated replacement cost of the building).

Remodeling C
Requires major remodeling of the building (approximate cost is greater than 50% of the replacement cost of the building).

Remodeling (Other)
To be used for all space requiring remodeling when Remodeling A, B, and C cannot be used.

Demolition/Termination
Should be demolished or abandoned because the building is unsafe or structurally unsound. Planned termination or relinquishment of occupancy of the building for reasons other than unsafeness or structural unsoundness.

Part C — Space Inventory by Room Use Categories

NOTE: Please report Assignable Area by major Room Use Categories [i.e., 3(a), 10(a), 15(a), 21(a), 31(a), 40(a), 47(a), 57(a), 63(a), 67(a) and 68(a)] even if Room Count and subcategory data are not available.

Line No.	Room Use Category	Assignable Area (in square feet) Column (a)	Room Count Column (b)
	CLASSROOM FACILITIES (100)		
1	110 Classroom		
2	115 Classroom Service		
3	***Total (100) Classroom Facilities (Sum of Lines 1-2)***		
	LABORATORY FACILITIES (200)		
4	210 Class Laboratory		
5	215 Class Laboratory Service		
6	220 Open Laboratory		
7	225 Open Laboratory Service		
8	250 Research/Nonclass Laboratory		
9	255 Research/Nonclass Lab Service		
10	***Total (200) Laboratory Facilities (Sum of Lines 4-9)***		
	OFFICE FACILITIES (300)		
11	310 Office		
12	315 Office Service		
13	350 Conference Room		
14	355 Conference Room Service		
15	***Total (300) Office Facilities (Sum of Lines 11-14)***		
	STUDY FACILITIES (400)		
16	410 Study Room		
17	420 Stack		
18	430 Open Stack Study Room		
19	440 Processing Room		
20	455 Study Service		
21	***Total (400) Study Facilities (Sum of Lines 16-20)***		
	SPECIAL USE FACILITIES (500)		
22	510, 515 Armory		
23	520, 523, 525 Athletic/Physical Education		
24	530, 535 Media Production		
25	540, 545 Clinic (Nonhealth)		
26	550, 555 Demonstration		

33 **Part C — Space Inventory by Room Use Categories, continued**

Line No.	Room Use Category	Assignable Area (in square feet) Column (a)	Room Count Column (b)
27	560 Field Building		
28	570, 575 Animal Quarters		
29	580, 585 Greenhouse		
30	590 Other		
31	***Total (500) Special Use Facilities (Sum of Lines 22-30)***		
	GENERAL USE FACILITIES (600)		
32	610, 615 Assembly		
33	620, 625 Exhibition		
34	630, 635 Food Facilities		
35	640, 645 Day Care		
36	650, 655 Lounge		
37	660, 665 Merchandising Facilities		
38	670, 675 Recreation		
39	680, 685 Meeting Room		
40	***Total (600) General Use Facilities (Sum of Lines 32-39)***		
	SUPPORT FACILITIES (700)		
41	710, 715 Central Computer/Telecommunications		
42	720, 725 Shop		
43	730, 735 Central Storage		
44	740, 745 Vehicle Storage Facility		
45	750, 755 Central Service		
46	760, 765 Hazardous Materials		
47	***Total (700) Support Facilities (Sum of Lines 41-46)***		
	HEALTH CARE FACILITIES (800)		
48	810, 815 Patient Bedroom		
49	820 Patient Bath		
50	830, 835 Nurse Station		
51	840, 845 Surgery		
52	850, 855 Treatment, Examination		
53	860, 865 Diagnostic Service Laboratory		
54	870 Central Supplies		
55	880 Public Waiting		
56	890, 895 Staff On-Call Facility		
57	***Total (800) Health Care Facilities (Sum of Lines 48-56)***		

33 **Part C — Space Inventory by Room Use Categories, continued**

Line No.	Room Use Category	Assignable Area (in square feet) Column (a)	Room Count Column (b)
	RESIDENTIAL FACILITIES (900)		
58	910, 919 Sleep/Study Without Toilet or Bath		
59	920 Sleep/Study With Toilet or Bath		
60	935 Sleep/Study Service		
61	950, 955 Apartment		
62	970 House		
63	***Total (900) Residential Facilities (Sum of Lines 58-62)***		
	UNCLASSIFIED FACILITIES (000)		
64	050 Inactive Area		
65	060 Alteration or Conversion Area		
66	070 Unfinished Area		
67	***Total (000) Unclassified Facilities (Sum of Lines 64-66)***		
68	***TOTAL ASSIGNABLE AREA & ROOM COUNT (Sum of Lines 3,10,15,21,31,40,47,57,63 and 67)***		

Part D — Total Campus Space, By Room Use and Functional Categories

NOTES: 1. In each line, Column (a) should equal the sum of Columns (b) through (k), and should agree with the specific entry from Part C.
2. Line 12, Column (a) should match the total campus assignable square feet reported in Part B.

				Use of Assignable Square Feet According to Functional Categories[14]				
Line No.	Room Use Category	Line No. from Part B	Total Assignable Square Feet Column (a)	1.0 Instruction Program Column (b)	2.0 Organized Research Column (c)	3.0 Public Service Column (d)	4.0 Academic Support Column (e)	5.0 Student Services Column (f)
1	100 Classroom Facilities	3						
2	200 Laboratory Facilities	10						
3	300 Office Facilities	15						
4	400 Study Facilities	21						
5	500 Special Use Facilities	31						
6	600 General Use Facilities	40						
7	700 Support Facilities	47						
8	800 Health Care Facilities	57						
9	900 Residential Facilities	63						
10	***Total Facilities in Use (Sum of Lines 1-9, Part C)***							
11	000 Unclassified Facilities	67						
12	***Total Assignable Area (Sum of Lines 10 and 11)***	68						

[14]Definitions for Functional Categories taken from FICM92 Appendix 2.

Part D — Total Campus Space, By Room Use and Functional Categories, continued

NOTES: 1. In each line, Column (a) should equal the sum of Columns (b) through (k), and should agree with the specific entry from Part B.
2. Line 12, Column (a) should match the total campus assignable square feet reported in Part A.

			Use of Assignable Square Feet According to Functional Categories[15]				
Line No.	Room Use Category	Line No. from Part B	6.0 Institutional Support Column (g)	7.0 Operation and Maintenance Column (h)	9.0 Auxiliary Enterprises Column (i)	10.0 Independent Operations Column (j)	11.0 Teaching Hospitals Column (k)
1	100 Classroom Facilities	3					
2	200 Laboratory Facilities	10					
3	300 Office Facilities	15					
4	400 Study Facilities	21					
5	500 Special Use Facilities	31					
6	600 General Use Facilities	40					
7	700 Support Facilities	47					
8	800 Health Care Facilities	57					
9	900 Residential Facilities	63					
10	***Total Facilities in Use (Sum of Lines 1-9)***						
11	000 Unclassified Facilities	67					
12	***Total Assignable Area (Sum of Lines 10 and 11)***	68					

[15]Definitions for Functional Categories taken from FICM92 Appendix 2.

APPENDIX 8

MAJOR CHANGES IN ROOM USE STRUCTURE FROM 1973 MANUAL

The majority of room use coding structure changes in this update are more complete elaborations within the Description and Limitations sections of each code. This approach avoids disrupting existing institutional files and coding schemes resulting from radical changes. In a few instances, code names and definitions have been slightly modified simply to provide greater clarity. The remaining substantive changes, itemized below, have been applied with the specific objective of eliminating recurring confusions with specific code applications. These confusions have occurred in the long interim since the last update primarily from 1) new equipment technologies appearing in institutional facilities, 2) a continued application of more creative names for rooms, and 3) minor inconsistencies in the previous use structure.

1. General header sections have been added as a preface to each major series to explain the special use characteristics of facilities within each section and to provide examples of the primary room use categories. These sections were also added, as quick reference tools, to assist coders in determining the appropriate general section to use in a search for accurate use code classification.

2. Within the 200-Laboratory Facilities series, the 220/225-Special Class Laboratory and 230/235-Individual Study Laboratory codes have been collapsed into a new, more comprehensive 220/225-Open Laboratory category. This classification includes all laboratories used primarily for individual or group instruction or learning that is *not* formally or regularly scheduled (or not scheduled), and eliminates many previous confusions with the 220 and 230 codings. The remaining 210-Class Laboratory and 250-Research/Nonclass Laboratory codes are further explained to make clearer distinctions within the 200 series.

3. Within the 400-Study Facilities series, the word "reading" has been changed to "study" to be compatible with the wide array of study tools (e.g., microcomputers, multimedia tools) now available in the self-instructional process. This update retains the original manual's concept of not restricting Study Rooms (410) to library environments, which are appropriately tracked by a primary function classification system. Descriptions and limitations have been significantly expanded for all codes in this series.

4. The 530/535 Audiovisual, Radio, TV, and Service codes have been updated in both name (e.g., Media Production) and explanation to accommodate current communication technologies.

5. The 540/545 Clinic-Nonhealth Professions and service codes have been redefined to include only patient or client care in other than separately organized health care facilities and to exclude remedial activities.

6. Codes for day care (see 640, 645) were created to accommodate these more frequently appearing facilities. Day/child care centers that are used for practice within the instructional process remain within the Demonstration (550) category.

7. The 690-Locker Room code has been eliminated because 1) locker rooms are more appropriately service areas, and 2) the previous RUCS edition often specified locker rooms as service areas (e.g., codes 525 and 725), and yet inconsistently provided this unique code.

8. The 710-Central Computer Or Telecommunications Facility and 715-Service codes have also been updated in name, definition, and description to distinguish more appropriately the various computer-based data processing and telecommunications facility configurations that appear on campuses.

9. The 730-Central Storage and 735-Service codes have also been updated in name, definition, and description to distinguish more clearly the differences between central and service area storage rooms.

10. Central Food Stores (750/755) and Central Laundry (760/765) facilities have been collapsed into a new and comprehensive Central Service (750/755) category. This new category also includes central mail, shipping and receiving, environmental testing, and printing and duplicating facilities that do not qualify as specific service areas. Central printing and duplicating areas were removed from 720-Shop and placed into this new category; centralized Audiovisual (multimedia) preparation areas were also removed from 720-Shop and classified under 530/535-Media Production. These uses were removed from the Shop category because they did not fit the definition well.

11. Hazardous Materials (760) and Hazardous Materials Service (765) codes have been created because of current attention and need for management of such facilities. Hazardous Materials (760) is intended as a *centralized* facility used for the storage, treatment, or disposal of hazardous or toxic waste materials. The Central Laundry (760) room code found in the previous manual has been deleted and is now combined with the renamed Central Service (750) room code as described above.

12. Service codes have been added to the 800-Health Care Facilities series to provide greater consistency in the coding system and to facilitate the inventorying of teaching hospitals and other large health care areas. The 895-Health Care Service code, which had very narrow application, was eliminated in favor of new 890/895 Staff On-Call Facility (and service) codes for this series.

APPENDIX 9

CROSSWALK OF 1973 AND 1992 ROOM USE CATEGORIES

100 - CLASSROOM FACILITIES

	1973 Manual		1992 Manual
110	Classroom	110	Classroom
115	Classroom Service	115	Classroom Service

200 - LABORATORY FACILITIES

	1973 Manual		1992 Manual
210	Class Laboratory	210	Class Laboratory
215	Class Laboratory Service	215	Class Laboratory Service
220	Special Class Laboratory	Code expanded and renamed. Combine existing 220 and 230 as 220 Open Laboratory.	
225	Special Class Laboratory Service	Code expanded and renamed. Combine existing 225 and 235 as 225 Open Laboratory Service.	
220	** Code Renamed **	220	Open Laboratory (220 + 230)
225	** Code Renamed **	225	Open Laboratory Service (225 + 235)
230	Individual Study Laboratory	Deleted. Combined with new 220.	
235	Individual Study Laboratory Service	Deleted. Combined with new 225.	
250	Nonclass Laboratory	250	Research/Nonclass Laboratory
255	Nonclass Laboratory Service	255	Research/Nonclass Laboratory Service

300 - OFFICE FACILITIES

	1973 Manual		1992 Manual
310	Office	310	Office
315	Office Service	315	Office Service
350	Conference Room	350	Conference Room
355	Conference Room Service	355	Conference Room Service

400 - STUDY FACILITIES

	1973 Manual		1992 Manual
410	Reading/Study Room	410	Study Room
420	Stack	420	Stack
430	Open-Stack Reading Room	430	Open-Stack Study Room
440	Processing Room	440	Processing Room
455	Study Service	455	Study Service

500 - SPECIAL USE FACILITIES

	1973 Manual		1992 Manual
510	Armory	510	Armory
515	Armory Service	515	Armory Service
520	Athletic/Physical Education	520	Athletic Or Physical Education
523	Athletic Facilities Spectator Seating	523	Athletic Facilities Spectator Seating
525	Athletic/Physical Education Service	525	Athletic Or Physical Education Service
530	Audiovisual, Radio, TV	530	Media Production
535	Audiovisual, Radio, TV Service	535	Media Production Service
540	Clinic (Nonhealth Professions)	540	Clinic
545	Clinic Service (Nonhealth Professions)	545	Clinic Service
550	Demonstration	550	Demonstration
555	Demonstration Service	555	Demonstration Service
560	Field Building	560	Field Building
570	Animal Quarters	570	Animal Quarters
575	Animal Quarters Service	575	Animal Quarters Service
580	Greenhouse	580	Greenhouse
585	Greenhouse Service	585	Greenhouse Service
590	Other	590	Other

600 - GENERAL USE FACILITIES

	1973 Manual		1992 Manual
610	Assembly	610	Assembly
615	Assembly Service	615	Assembly Service
620	Exhibition	620	Exhibition
625	Exhibition Service	625	Exhibition Service
630	Food Facilities	630	Food Facility
635	Food-Facilities Service	635	Food Facility Service
640	** New Code **	640	Day Care
645	** New Code **	645	Day Care Service
650	Lounge	650	Lounge
655	Lounge Service	655	Lounge Service
660	Merchandising Facilities	660	Merchandising
665	Merchandising Facilities-Service	665	Merchandising Service
670	Recreation	670	Recreation
675	Recreation Service	675	Recreation Service
680	Meeting Room	680	Meeting Room
685	Meeting Room Service	685	Meeting Room Service
690	Locker Room	Deleted. Reassign to: 115 Classroom Service or 215 Class Laboratory Service or 225 Open Laboratory Service or 315 Office Service or xx5 other room service code.	

700 - SUPPORT FACILITIES

	1973 Manual		1992 Manual
710	Data Processing/Computer	710	Central Computer Or Telecommunications
715	Data Processing/Computer Service	715	Central Computer Or Telecommunications Service

720	Shop	720	Shop
725	Shop Service	725	Shop Service
730	Storage	730	Central Storage
735	Storage Service	735	Central Storage Service
740	Vehicle-Storage Facility	740	Vehicle Storage
745	Vehicle-Storage Facility Service	745	Vehicle Storage Service
750	Central Food Stores	Code expanded and renamed. Combine existing 750 and 760 as 750 Central Service.	
750	** Code Renamed **	750	Central Service (750 + 760)
760	Central Laundry	Deleted. Combined with new 750.	
760	** New Code **	760	Hazardous Materials
765	** New Code **	765	Hazardous Materials Service

800 - HEALTH CARE FACILITIES

	1973 Manual		1992 Manual
810	Patient Bedroom	810	Patient Bedroom
815	** New Code **	815	Patient Bedroom Service
820	Patient Bath	820	Patient Bath
830	Nurse Station	830	Nurse Station
835	** New Code **	835	Nurse Station Service
840	Surgery	840	Surgery
845	** New Code **	845	Surgery Service
850	Treatment	850	Treatment/Examination
855	** New Code **	855	Treatment/Examination Service
860	Service Laboratory	860	Diagnostic Service Laboratory
865	** New Code **	865	Diagnostic Service Lab Support
870	Supplies	870	Central Supplies
880	Public Waiting	880	Public Waiting

890	** New Code **	890	Staff On-Call Facility
895	Health Care Service		Deleted. Apply appropriate service code to primary room code.
895	** Code Renamed **	895	Staff On-Call Facility Service

900 - RESIDENTIAL FACILITIES

	1973 Manual		1992 Manual
910	Sleep/Study W/O Toilet/Bath	910	Sleep/Study Without Toilet Or Bath
919	Toilet/Bath	919	Toilet Or Bath
920	Sleep/Study With Toilet/Bath	920	Sleep/Study With Toilet Or Bath
935	Sleep/Study Service	935	Sleep/Study Service
950	Apartment	950	Apartment
955	Apartment Service	955	Apartment Service
970	House	970	House

000 - UNCLASSIFIED FACILITIES

	1973 Manual		1992 Manual
050	Inactive Area	050	Inactive area
060	Alteration or Conversion Area	060	Alteration or Conversion Area
070	Unfinished Area	070	Unfinished Area

NONASSIGNABLE AREA

	1973 Manual		1992 Manual
WWW	Circulation Area	WWW	Circulation Area
XXX	Custodial Area	XXX	Building Service Area
YYY	Mechanical Area	YYY	Mechanical Area
ZZZ	Structural Area		No longer included in nonassignable area.

GLOSSARY

The definitions and explanations of building measurement terms, room use categories, functional codes and other basic components of a facilities inventory data system are contained in the appropriately-identified sections of this manual. Users are referred to the Table of Contents for sections and page locations. This glossary does not attempt to provide abbreviated definitions of these technical components, although some references are included.

In addition, this glossary contains brief definitions of generic terms related to facilities inventory data and explanations of the acronyms and abbreviations of terms or organizations referred to in this manual. Also included are definitions for terms related to institutional identification, enrollments, and faculty which may be useful in relation to the use of facilities data.

AAALAC: American Association for Accreditation of Laboratory Animal Care.

Academic Discipline (Coding): See explanation in Chapter 2 and Appendix 3.

Academic Program: Instructional program of a professional or non-occupationally specific nature leading toward an associate's, bachelor's, master's, doctor's, or first-professional degree or resulting in credits that can be applied to one of these degrees.

Academic Year: The period of time generally extending from September to June; usually equated to two semesters or trimesters, three quarters, or the period covered by a 4-1-4 plan.

Administratively Equal Institution: Separately organized, or independently administered site or campus with its own full administration and records system within an institutional system. This institution may report to a system office but does not report to any other institution.

Assignable Area: Sum of ten major Room Use Categories of Assignable Space. See *Building Measurement Terms* in Chapter 2, and see definitions in Chapter 4.

Branch Institution: A campus or site of an educational institution that is not temporary, is located in a community beyond a reasonable commuting distance from its parent institution, and which offers organized programs of study, not just courses.

Building: A roofed structure for permanent or temporary shelter of persons, animals, plants, or equipment. See *Concepts and Components of a Building* in Chapter 2 for inclusions and exclusions.

Building Condition: See *Other Building Information* in Chapter 4 for definition and codes, and see applications in Chapter 2, Chapter 4, and Appendix 7.

Building Data: Descriptive characteristics of a building, such as gross area, assignable area, condition, ownership, estimated replacement cost, and year of construction. See *Recommended Building Data Elements* and *Optional Building Data Elements* in Chapter 2, and see measurement definitions in Chapter 4.

Building Ownership Status: See definitions in *Other Building Information* in Chapter 4, and see applications in Chapter 2, Chapter 4, and Appendix 7.

Building Service: See *Building Measurement Terms* in Chapter 2, and see definitions in *Definitions of Building Areas* in Chapter 4.

Central Office or System Office: The administrative body or component responsible for supervision of a multi-institutional system.

Circulation Area: See definition in *Definitions of Building Areas* in Chapter 4, and see applications in Chapter 4.

CIP (Classification of Instructional Programs): An NCES publication that classifies instructional programs by standard terminology for curriculum and instruction in local and state school systems and postsecondary institutions. See Appendix 3.

Contact Hour: A unit of measure that represents an hour (50-70 minutes) of scheduled instruction given to students. The total number of hours spent by all students in scheduled instructional activities during a specified period of time can be determined as follows:

> If a course with an enrollment of 20 students meets 3 hours per week for 15 weeks, the number of student contact hours is 20 x 3 x 15 = 900. Similarly, if a course with an enrollment of 20 students meets 8 hours per day for 2 days, the number of student contact hours is 20 x 8 x 2 = 320.

Correspondence: Method of instruction with students receiving structured units of information and accompanying material completely through the mail or electronic media.

Estimated Replacement Cost: See definition in *Other Building Information* in Chapter 4, and see applications in Chapter 2 and Chapter 4.

Facilities: Any physical structure or space required by the institution for the performance of its programs and related activities.

Facilities Inventory: A database containing statistical information on statistical buildings, including both building and room data as defined in this glossary.

FICE: Federal Interagency Committee on Education. Each institution of higher education in the United States may be identified by its unique FICE number.

Fixed Equipment: Permanently attached appurtenances, such as elevators, fire protection systems, lighting, plumbing, heating, ventilation and built-in air conditioning systems (excluding window or console air conditioning units that require no duct work or cooling towers).

Functional Categories and Codes: See Chapter 2 and Appendix 2.

Function (Functional Codes): A set of activities that are collectively designed to achieve a well-defined objective or set of objectives within the institution. See Chapter 3 and Appendix 2 for explanation of the recommended functional codes.

HEGIS: Higher Education General Information Survey conducted by the National Center for Education Statistics (NCES), incorporated into IPEDS after 1985 (see IPEDS).

Institutional System: Two or more institutions of higher education under the control or supervision of a single administrative body.

IPEDS: The Integrated Postsecondary Education Data System comprised of a series of annual and regular periodic institutional surveys of all postsecondary institutions administered by the National Center for Education Statistics (NCES).

Mechanical Area: See definition in *Definitions of Building Areas* in Chapter 4, and see applications in Chapter 4.

Multi-Institution System: An institution that has either: 1) two or more sites or campuses responsible to one administration which may or may not be located on one of the sites or campuses, or 2) a primary site or main campus with one or more branches attached to it.

Net Usable Area: See definition in *Definitions of Building Areas* in Chapter 4.

Nonassignable Area	The sum of the Building Service Area, the Circulation Area and the Mechanical Area, all of which are not assigned directly to support programs. See definitions in Chapter 2 and Chapter 4.

Off-Campus Centers: A site of an educational institution that is outside the physical confines of its parent institution, that is not temporary, and offers courses or services that are part of an organized program at the parent institution.

Off-Campus Facility: A facility located some distance away from the educational institution which operates it.

Organizational Unit: The basic component of the organizational structure of a college or university. Usually referred to as a department, but including both academic units (e.g., English

Department, Physics Department, School of Law, etc.) and administrative units (e.g., Office of the President, Registrar, Physical Plant, etc.).

Parent Institution: The administrative unit or institution in a multi-institutional system through which all the system's institutions, branches, and programs are linked.

Parking Structures: See discussion of options in *Parking Structures* in Chapter 4.

Postsecondary Education: The provision of a formal instructional program whose curriculum is designed primarily for students who have completed the requirements for a high school diploma or its equivalent. This includes programs whose purpose is academic, vocational, and continuing professional education, and excludes avocational and adult basic education programs.

Primary Use: See discussions in Chapter 2 and Chapter 5.

Room: A room is a space normally enclosed on all sides including alcoves and recesses. Covered play areas, covered patios, and covered walkways are exceptions to the enclosure criterion.

Room Data: Descriptive characteristics of assignable interior spaces of a building, including standard room use categories, institutional organizational units, academic discipline and function codes, assignable floor areas and, in some instances, numbers of stations. See *Recommended Room Data Elements* and *Optional Room Data Elements* in Chapter 2.

Room Suitability: See discussion in Chapter 2 and Appendix 5.

Room Use Category Structure (RUCS): See *Room Use Categories* in Chapter 2, and see Chapter 5.

Service Codes: See *Service Codes* in Chapter 5, and see applications in Chapter 2 and Chapter 5.

SHEEO: State Higher Education Executive Officers.

Single Institution: A postsecondary institution that operates independently from other institutions. The institution may offer instruction at more than one geographic site, but all administration and governance and recordkeeping are at one site.

Structural Area: See definition in *Definitions of Building Areas* in Chapter 4.

Unit ID: Unique identification number assigned to postsecondary institutions surveyed through the Integrated Postsecondary Education Data System (IPEDS).

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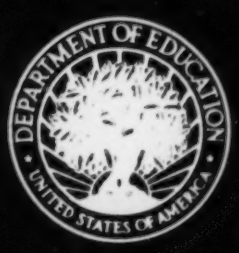

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